

AN EMPIRICAL PHENOMENOLOGICAL-PSYCHOLOGICAL  
INVESTIGATION OF URINARY URGENCY IN INCONTINENT WOMEN

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## ABSTRACT

Many barriers to help seeking for urinary incontinence (UI) have been reported in the literature. In the past decade, studies of Overactive Bladder Syndrome (OABS), a condition characterized by symptoms of urinary urgency with or without urgency incontinence, have suggested that urinary urgency may be a useful target to promote recognition of continence problems at earlier stages of illness. This qualitative study was conducted to advance health promotion through the clarification of the phenomenon of urinary urgency in ambulatory incontinent women diagnosed with OABS. Ten female patients with a diagnosis of OABS or mixed UI with clinically significant urinary urgency were recruited at a community urological clinic. Interviews were conducted to obtain descriptions of situations in which urinary urgency occurred. Three transcripts were analyzed using the empirical phenomenological-psychological approach and a single psychological structure was generated. Phenomenological reflections revealed that urinary urgency was an episodic phenomenon that was lived through in association with a concomitant urine flow (*flow urgency*) or a sense of imminent flow (*pre-flow urgency*). During episodes of urinary urgency, participants were aware that they lacked the capacity to contain urine in a situation (*sense of inefficacy*), and they felt “pressed” to get to a toilet quickly, as well as uncertain about being able to get to a toilet before urine leakage emerged. Irrespective of whether urine leakage occurred, all participants described

emotional sequelae related to the disclosure of urinary flow to others (i.e., distress, embarrassment, sense of inadequacy), which the women attempted to alleviate using material, psychological, relational, and medical strategies. The emotional impact was intensified when access to toilets was hindered by idiographic health and environmental circumstances. These structural features may be useful for enhancing communication between healthcare practitioners and patients regarding urgency during consultations. The results supported a conception of urine containment as an embodied, generative capability that is influenced by one sense of efficacy, or self belief in that capability. The results also supported the need to explore ways in which self-efficacy could be enhanced in patients diagnosed with OABS as a means to promote therapeutic change.

We will find no intelligibility in behavior if we see it as an inessential phase in an essentially inhuman process. We have had accounts of men as animals, men as machines, men as biochemical complexes with certain ways of their own, but there remains the greatest difficulty in achieving a human understanding of man in human terms.

--Ronald D. Laing (1967)

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## LIST OF SYMBOLS AND ABBREVIATIONS

EPP	empirical phenomenological-psychology (-ical)
HRQoL	health-related quality of life
ICS	International Continence Society
IDC(s)	involuntary detrusor contraction(s)
LUT	lower urinary tract
ml	millilitres
MU(s)	meaning unit(s)
OABS	Overactive Bladder Syndrome
SUI	stress urinary incontinence
TMU(s)	transformed meaning unit(s)
UI	urinary incontinence
UUI	urge urinary incontinence

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## CHAPTER ONE: INTRODUCTION

Urinary continence is a complex, cross-cultural concept referring to the regulation and control of the excretion of urine from the bladder. It is an essential aspect of individual and population health (Berk & Friman, 1990; Klyman, 2004; Peake & Manderson, 2003). According to the Agency for Health Care Policy and Research, more than five million Canadian and 33 million American adults experience the *involuntary loss of urine*, or urinary incontinence (UI), often in association with a strong compelling desire to void (urgency UI), and/or with abdominal pressure changes due to cough, sneeze, laugh, or postural shifts (stress UI; Fantl et al., 1996). The estimated annual cost of managing all types of UI in the United States was 16 billion US dollars in 1996, with nursing home admissions identified as the most potent expenditure (Fantl et al., 1996; Klyman, 2004). Typically, UI co-occurs with other lower urinary tract (LUT) symptoms, including increased daytime and/or nighttime micturition frequency, as well as other voiding disturbances (e.g., urinary hesitancy, weak stream). Together, these symptoms have significant psychosocial impact on sufferers and their families, including lost productivity, family and social disruption, and co-morbid psychological disorders (Fantl et al., 1996). For decades, there has been consensus amongst international health policymakers that the enormity of the individual and societal burden related to

UI justifies a substantial investment of time and resources to reduce its morbidity (Fantl et al., 1996). Both psychosocial and biological aspects of UI have been identified as areas for clinical intervention to alleviate symptoms, facilitate social/lifestyle adjustment and reduce vulnerability to co-morbid psychological disorders, including depression and anxiety (Lee, Reid, Zorzitto, Nadon & Craig, 1992; Serels, 2004; Tovian et al., 1994). This chapter introduces the challenge of providing health care for UI sufferers due to their reluctance to disclose the problem, as well as the revisions to bladder storage disorder nosology that offer new opportunities to intervene in this condition.

#### *Urinary Incontinence: The Problem*

A significant portion of the overall psychosocial and economic burden associated with UI is due to sufferers' lack of disclosure in healthcare settings. Urinary incontinence has a high rate of reversibility following medical intervention, but approximately 40-75% of individuals with urinary symptoms (e.g., urinary urgency, frequency and/or UI) fail to report their condition to a health care practitioner and a vast number of cases remain undiagnosed (Burgio, Ives, Locher, Arena, & Kuller, 1994; Holst & Wilson, 1988; Hunskaar, 1992; Milsom et al., 2001; Ricci, Baggish, & Hunt, 2001; Roberts et al., 1998). Instead, UI is often managed with personal continence care routines (e.g., pads, frequent voiding) that enable sufferers to "remain in charge of the urinary elimination process" by "handling the

urine output in an acceptable way” (Dowd, 1991, p. 181). Typically, adults do not seek treatment until they have exhausted virtually all of their physical, emotional and social coping mechanisms, if they seek treatment at all (Klyman, 2004).

Scientific studies have identified multiple factors that influence the decision to seek treatment for urinary symptoms (Table 1). In-depth anthropological and sociological investigations of the cultural aspects of UI offer some insights about why people fail to disclose the problem. Peake and Manderson's (2003) analysis highlighted the indignity of UI that follows from violating the implicit cultural norms regarding restraint and control essential to everyday interactions. Mitteness and Barker (1995) identified sufferers' feelings of being compromised in the eyes of others when disclosing these experiences. Contextual factors, such as the widespread availability of absorbent products in Western society, have been advanced as contributing to the length of time women manage UI without seeking medical help (Peake & Manderson, 2003). Lastly, structural factors may also contribute to patients' non-disclosure. For example, prior to 2003, UI was defined as a medical symptom when it caused “social or hygienic problems” (Abrams, Blaivas, Stanton, & Andersen, 1990; p. 56), which implied that as long as UI could be managed in social situations and in ways that were hygienic, its appearance in the lives of individuals was not viewed as problematic. This definition was revised in 2003 to demarcate any involuntary loss of urine as indicative of a problem (Abrams et al., 2003).

Table 1: Factors Influencing Treatment-Seeking for Urinary Symptoms

<b>Factor</b>	<b>Reference</b>
Severity of incontinence	Burgio et al., 1994
Severity of disability due to incontinence	Burgio et al., 1994; Roberts et al., 1998; Ricci et al., 2001
Low expectation of treatment benefit or Belief that no effective treatment was available	Fantl et al., 1996; Holst & Wilson, 1988; Milsom et al., 2001; Umlauf, Goode, & Burgio, 1996
Illness viewed as normal part of aging/childbirth	Holst & Wilson, 1988; Shaw, Tansey, Jackson, Hyde, & Allan, 2001
Use of control measures (e.g., absorbent pads)	Hunskaar, 1992
Embarrassment	Roe, Doll, & Wilson, 1999
Fear of social disapproval	Umlauf et al., 1996
Lack of knowledge regarding disease	Shaw et al., 2001

From a medical perspective, UI is classified as a symptom rather than a disease, and is caused by “pathological, anatomical or physiological conditions within the urinary system or elsewhere in the body” (Tovian, Rozensky, Sloan, & Slotnick, 1994; p. 340). As such, UI has several types of clinical presentation (e.g., stress UI, urgency UI, overflow UI, etc.) and emerges as part of numerous medical conditions - each of which has a distinct prevalence, psychological impact and natural history. This project focuses on the experience of urinary urgency in incontinent women in situations where neurological (e.g., Parkinson’s disease, multiple sclerosis) and non-neurological diseases (e.g., infection, cancer, stones) have been ruled out as contributing causes. This idiopathic condition is observed in about 40% of medical patients presenting for specialist assessment (Borrie & Valiquette, 2002; Dolan & Hilton, 2003; Flisser & Blaivas, 2002; Jarvis, 1982; McGuire, 2000; Oliver, Fowler, Mundy & Craggs, 2003; Wein, 2003), and has been the subject of considerable attention in urological research over the last decade. We now turn to a description of recent changes in medical models of idiopathic urgency UI, and the implications for managing the condition.

### *The Introduction of Overactive Bladder Syndrome and its Sub-types*

Medical models of idiopathic urgency UI have recently undergone a significant shift in terms of how the condition is understood by medical professionals. Historically, this condition was considered to be related to psychosomatic triggers,



such as neurotic personality traits and situational stressors, and sufferers were often referred for treatment of a Psychophysiologic Genitourinary Disorder, as denoted in the *Diagnostic and Statistical Manual*, 2<sup>nd</sup> Edition (American Psychiatric Association, 1968; Andersen, 1992; Auerbach & Smith, 1952; Freeman, 1987; Freeman, McPherson & Baxby, 1985; Hunt, 1996; Macaulay, Stern, & Stanton, 1991; Morrison, Eadie, McAlister, Glen, Taylor, & Rowan, 1986; Rowan, 1975). Around 1999-2002, a new model was introduced that asserted urinary urgency as the core pathological driver of frequent urination and/or UI (Blaivas, 2007; Brubaker, 2004; Chapple et al., 2005; Gillespie, 2004; Starkman & Dmochowski, 2008; Wyndaele & DeWachter, 2008). In medical practice, urinary urgency refers to a pathological sensation triggered by neurogenic or myogenic processes that is experienced by patients as “a sudden, compelling desire to pass urine, which is difficult to defer” (Abrams et al., 2003, p. 38). Contemporary biomedical research is directed towards uncovering the physiological mechanisms underlying urgency, as well as the best ways to alleviate the symptom with pharmacotherapy (Michel & Chapple, 2009; Starkman & Dmochowski, 2008).

In 2002, this model was established as a diagnostic entity, Overactive Bladder Syndrome (OABS), by the International Continence Society (ICS) and replaced the previously used terms, idiopathic urgency-frequency syndrome and idiopathic urgency UI. Criteria for the OABS diagnosis included the subjective report of urinary urgency with or without other LUT symptoms, such as UI, frequent daytime and/or

nighttime micturition, once neurological and non-neurological factors have been ruled out (Table 2; Abrams et al., 2003). Two sub-types of OABS were discerned: OABS-dry refers to the presence of urgency with or without a high frequency of urination, and OABS-wet refers to the presence of urgency with UI. Given that bladder sensations are made possible by sensory afferent nerve impulses from the LUT to the brain in response to muscular stretching, contraction and pressure (Michel & Chapple, 2009; Wyndaele & DeWachter, 2008), an OABS diagnosis is not given in situations where the capacity for sensory input has been interrupted (e.g., loss of consciousness) or damaged (e.g., lesions, brain disease, spinal cord injury; Williams, Yeomans, Curran, & Blackwood, 1993; Wyndaele & DeWachter, 2008).

Once OABS was established, the assessment of urgency in clinical research uncovered new perspectives on the trajectory of UI over the lifespan. At present, evidence suggests that changes in urinary function begin early in the lifespan with the onset of urgency and frequent urination (i.e., the OABS-dry subtype; Chapple et al., 2005; Petros & Ulmsten, 1993; Stewart et al., 2003). In epidemiological studies, urinary urgency is reported across all age strata in females, beginning at least as early as 30 years of age (Geirsson, Fall & Lindstrom, 1993; Haylen et al., 2007; Romanzi, Groutz, Heritz & Blaivas, 2001; Stewart et al., 2003). Moreover, these studies reveal that the OABS-dry subtype is predominant in younger cohorts (30 to 50 years), whereas the OABS-wet subtype is predominant in older cohorts (over 60 years of age; Geirsson et al., 1993; Haylen et al., 2007; Romanzi et al., 2001; Starkman &

Table 2: Diagnostic Criteria for Overactive Bladder Syndrome (Abrams et al., 2003; Abrams et al., 2009; Blaivas, 2007; Wein, 2003)

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- (i.) The subjective complaint of urinary urgency
  
  - (ii.) With or without one or more of the following symptoms:
    - Involuntary urine leakage (urinary incontinence, UI)
    - Frequent daytime urination: more than 8 voids/24 hour period
    - Nocturia: defined as awakening from sleep to urinate
  
  - (iii.) Confirmed absence of neurological, infectious, metabolic and obstructive etiologies
-

Dmochowski, 2008; Stewart et al., 2003). In the early stages of OABS, urgency is managed using pelvic floor muscle contractions and/or sprinting to a proximate toilet to avert leakage, as well as preventive measures to avoid episodes of urgency, such as limiting fluid consumption and frequent voiding (Chapple et al., 2005; Haylen et al., 2007; Romanzi et al., 2001). Although the changes in urinary function and associated lifestyle adaptations are successful in achieving continence over the short term, the deterioration of the female pelvic floor musculature and reductions in physical mobility (i.e., hindering swift movement to the toilet) associated with aging increase the probability that UI occurs when urgency appears (Haylen et al., 2007; Romanzi et al., 2001; Stewart et al., 2003). Age-related impairments in the awareness of bladder-related sensations, as well as cognition (i.e., planning, decision-making), have also been suggested as possible factors that alter the ability to regulate the psychomotor circuit and facilitate transition from OABS-dry to OABS-wet in patients over 65 years of age (Geirsson et al., 1993; Griffiths, McCracken, Harrison, & Moore, 1996).

#### *Early Detection of Urinary Urgency: Rationale and Challenges*

Knowledge of the developmental trajectory of OABS offers new opportunities with which to intervene in this condition. For decades, disorders of bladder storage, of which urgency UI is one, have been equated with the appearance of “storage failures” (i.e., UI). As such, the appearance of UI was the trigger for medical assessment and treatment, which as noted earlier, is a very difficult topic for people to

discuss, and evokes secrecy and self-management (Ashworth & Hagan, 1993). However, the establishment of OABS offers a broader context within which to understand the appearance of UI. Since urinary urgency emerges earlier in the lifespan than UI, a focus on this less catastrophic shift in urinary function may hold several advantages for medical management. First, it enables the identification and treatment of urinary dysfunction at its earliest stages. Early intervention may prevent the need for surgery and facilitate the use of more conservative treatment with fewer risks. Moreover, earlier intervention will alleviate the lengthy periods in which psychosocial and economic consequences are felt by sufferers. Second, it enables the identification of persons-at-risk for developing UI (i.e., OABS-dry), which might alleviate the number of cases that transition from OABS-dry to OABS-wet. Third, the topic of urinary urgency may be one that is easier for medical patients to discuss and it may facilitate disclosure of urinary symptoms. In particular, persons who are already experiencing leakage may feel more comfortable discussing urgency, because changes in the experience of urination would bear less emotional valence than urine leakage.

The advancement of urinary urgency as the target of intervention has already created a demand for more robust communication about this symptom in medical settings. Since urgency is a “subjective indicator of a disease or change in condition as perceived by the patient”, it requires evaluation as part of the process of differential diagnosis (Abrams et al., 2003, p. 37). In addition, urgency measurement is a

valuable part of clinical studies evaluating the efficacy of pharmaceutical or other treatments (Hung et al., 2006). From a medical perspective, the core component of urgency assessment involves the discernment of the abnormal sensation of urgency from other sensations related to bladder filling in everyday life (i.e., the normal urge to void; Starkman & Dmochowski, 2008). This task has proved to be both difficult and controversial (Abrams, 2005; Abrams, Chapple, Jünemann, & Sharpe, 2012; Chapple & Wein, 2005; Staskin, 2004; Wein, 2005).

Two different models have been proposed to understand the relationship between urgency and the urge to void. One model proposes that urinary urgency is the most extreme urge on a spectrum of other, less intense, urges to void (Blaivas, 2007; Blaivas, Panagopoulos, Weiss, Somaroo, & Chaikin, 2007), and pathology can be differentiated by assessing the length of time that patients believe they can defer voiding after becoming aware of the need to do so. An alternative model asserts that urinary urgency is an all-or-nothing phenomenon that, once triggered, incites an activation of the micturition circuit controlling voiding, and evokes immediate contraction of the bladder muscle leading to urine release (Chapple et al., 2005). According to this latter view, urgency cannot be graded in intensity, and pathology is indicated by the difficulties in deferring voiding. Both models have been criticized for their failure to consider the experience of urgency in LUT conditions other than OABS (e.g., urinary tract infection, interstitial cystitis; Brubaker, 2005; Diggs et al.,

2007, Meijlink, 2005). At present, specialists in the fields of urology and gynecology continue to debate the acceptability of these models.

With respect to the difficulties in patient-practitioner communication about urgency, at least two issues have been identified by urologists (Abrams et al., 2012; Starkman & Dmochowski, 2008). According to Abrams et al. (2012), the first issue relates to ensuring that the medical meaning of the term is conveyed with sufficient clarity to patients such that they can differentiate urgency from the everyday sensations of bladder filling. Some physicians have expressed the view that the difficulties arise because patients either do not receive an explanation, or that the explanation they do receive is incorrect, although what constitutes “incorrect” remains an issue of current debate (Wein, 2005). Use of laymen’s terms has been advocated as a means to explain urgency to ensure patients’ understanding, but physicians have been concerned about the possibility that their explanations will unduly influence patients’ subjective reports of symptoms (Abrams et al., 2012; Brubaker, 2004). The second issue, according to Abrams et al. (2012), relates to the need for “more education and guidance [about] ...what ‘urgency’ means to both patients and clinicians” (p. 391). An alternative explanation of the communication difficulties is that the specialized disciplinary knowledge applied by physicians to understand urgency (i.e., biological models of sensation) involves a kind of scientific reduction of the experiential world (i.e., the *life-world*) that has little fidelity to how sufferers spontaneously encounter it in their everyday lives (i.e., its meaning; Giorgi, 1976,

1983b). To date, only one qualitative study has examined the experiences of urinary urgency in males and females with OABS symptoms (i.e., Nicolson, Kopp, Chapple, & Kelleher, 2008) and so little is known about the patients' perspective in this regard.

*Purpose of the Present Dissertation:*

The purpose of this qualitative investigation was to explicate the mode and manner in which urinary urgency appears in the everyday life of ambulatory incontinent women diagnosed with OABS from a psychological perspective. The approach sought to build an understanding of urgency grounded in the experiential accounts of those who have encountered it in daily life. Specifically, the Husserlian approach to empirical phenomenological psychology (EPP), developed by Amedeo Giorgi (2009), was chosen due to the chronological primacy placed on the everyday worlds of humans (e.g., their psychological reality as they experience it in everyday life) and the priority afforded to how things appear in ordinary life (presences or experienced reality) as a starting point for this human science investigation (Giorgi, 1983b). The method involves collecting descriptions of situations in which the phenomenon<sup>1</sup> of urinary urgency was lived, and then the researcher describes how

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<sup>1</sup> The term "phenomenon" in Husserl's philosophy has a specific disciplinary meaning that refers to "whatever is given, or presents itself.", and is "understood precisely as it presents itself to the consciousness of the person..." (Giorgi, 1997, p. 237). Note that this disciplinary meaning is different from everyday use of the word, which refers to an occurrence or incident, and phenomenological researchers are required to cultivate a particular attitude in order to view an event in the everyday world as a phenomenon (Giorgi, 2008). This approach and method are elaborated in Chapters Three and Four.



things or events appear to the consciousness of the experiencer (experienced reality or presences), rather than how they are in themselves (reality in itself or reality as objectively understood; Giorgi, 1983*b*, 1989*a*). This application of the Giorgi (2009) method of empirical phenomenological psychology has particular utility in the case of urinary urgency, because it enables the researcher to uncover the psychological meanings from the sufferer's perspective and to enhance inter-subjectivity (i.e., shared meaning) between patients and medical providers in health settings. In addition, the results of the present study have implications for the design of screening initiatives that seek to identify the experience of urgency in community-dwelling individuals who have not sought out medical services.

*Outline of the Dissertation:*

This qualitative investigation of the lived experience of urinary urgency in incontinent women diagnosed with Overactive Bladder Syndrome (OABS) is presented in six chapters. This first chapter outlined the rationale for the study, including an overview of the problem of urinary incontinence (UI), as well as a brief historical description of idiopathic urgency UI and the recent nosological revisions leading to its designation as OABS. In the second chapter, a review of the literature is presented, including the biological basis, prevalence, assessment, psychosocial impact, and treatment of OABS. An overview of past clinical psychological approaches to bladder storage dysfunction is also articulated. In the third and fourth

chapters, I outline the foundations of the qualitative approach employed in this study, and then present the study design, participant recruitment, ethical considerations, and steps of the analytic method. In Chapter Five, the results of the qualitative analysis are described, including the psychological structure of the lived experience of urinary urgency, as well as an elaboration of how these psychological meanings were lived out by each participant. In the final chapter, a summary of the psychological features of urinary urgency in terms of its mode and manner of appearance in the lives of ambulatory incontinent women is presented, followed by a discussion of the significance of these findings within the context of current scientific knowledge. Lastly, the implications of these findings for the future clinical health psychology practice and research in OABS are discussed.

## CHAPTER TWO: LITERATURE REVIEW

The purpose of this chapter is to present a review of the research literature regarding the biological, social, and psychological dimensions related to Overactive Bladder Syndrome (OABS), as well as introduce the role of the urge to urinate in regulating the everyday activities of urination. First, an overview of the biological basis of urine storage and excretion is presented, followed by a review of the literature regarding the characteristics of urinary urgency, prevalence, clinical assessment, treatment and psychosocial impact of OABS. A summary of prior clinical psychological approaches to bladder storage dysfunction is also articulated. The chapter concludes with comments about the experiential aspects of urinary continence, including the early developmental process of learning how to initiate and terminate urine flow from the bladder (e.g., toilet training), and the sense of knowing when the bladder needs to be emptied, also known as the urge to urinate.

### I. The Biological Basis of Urine Storage and Excretion

Urine is the by-product of kidney filtration, which removes and detoxifies liquid waste (e.g., urea) from the bloodstream (Chai & Steers, 1996). A variety of physiological processes facilitate the collection, storage and excretion of urine,

resulting in the removal of toxic metabolic by-products from the human body and maintaining the integrity of tissues and organs. On average, urine is transported from the kidney and empties into the bladder at a rate of approximately 1-2 millilitres (ml) per minute, where it is collected and stored at low pressures until it is excreted rapidly through the urethra at discrete intervals (Figure 1; Chai & Steers, 1996). The storage and excretion of urine requires a complex and dynamic interplay between the central nervous system, peripheral nervous system, and the anatomic structures of the detrusor, or muscular layer of the bladder, the internal and external urethral sphincters, and the muscles of the pelvic floor (Figures 1 and 2; Andersson, 1988; Andersson, Chapple & Wein, 2001). In the PNS, both autonomic nerves (sensory afferent and motor efferent) and somatic nerves facilitate urine storage and excretion (Artibani, 1997; DeGroat, 1997; Oliver et al., 2003; Wyndaele & DeWachter, 2008). In continent individuals, states of activation or inhibition in these neural systems are integrated with an individual's intention to void, which is discussed in a forthcoming section of this chapter (DeGroat, 1997).

As the bladder passively fills with urine, urothelial mechanoreceptors are activated by distension and stretching in the bladder wall, which trigger the generation of electrochemical impulses along sensory afferent nerves (Blok & Holstege, 1998; DeWachter & Wyndaele, 2001; DeGroat, 2006). During the storage phase, low-level afferent firing stimulates sympathetic outflow to the bladder base and urethra, as well

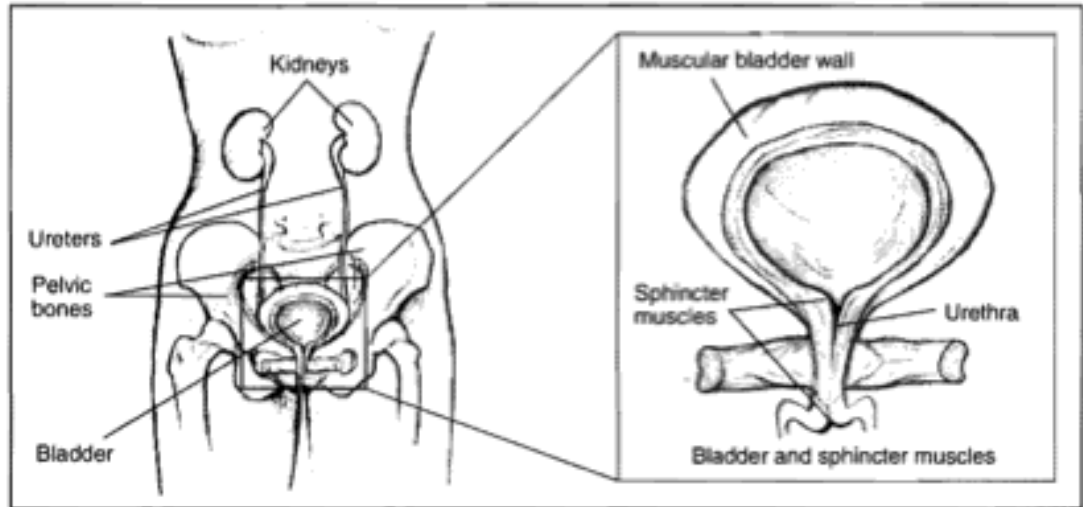


Figure 1: Illustration of the abdominal/pelvic area in the human female. These images reveal the location of the kidneys, ureters, bladder, urethra, and pelvic bones (left) and close-up view of female bladder, urethra and sphincters (right). Reproduced with permission from the National Kidney and Urologic Disorders Information Clearinghouse (2007).

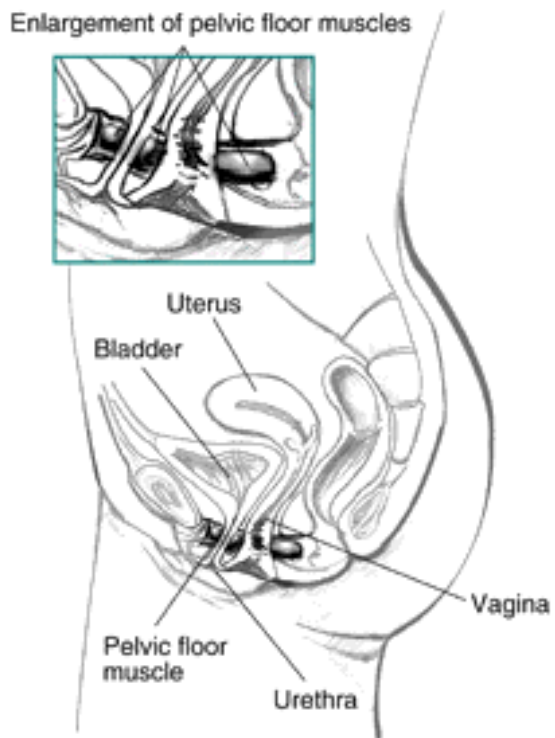


Figure 2: Sagittal view of bladder and urethra and supporting pelvic floor muscles, in relation to uterus and vagina. Reproduced with permission from the National Kidney and Urologic Disorders Information Clearinghouse (2007).

as pudendal nerve outflow to the external urethral sphincter. These two spinal reflex pathways promote continence and are called guarding reflexes (DeGroat, 2006). At the same time, brain-to-bladder parasympathetic motor nerve pathways are quiescent, which facilitates the stretching of the muscular layers and gradual accommodation of increasing urine volume. During excretion, intense sensory afferent nerve firing activates the spinobulbospinal reflex passing through the pontine micturition centre (PMC) in the brain (Blok & Holstege, 1998; DeGroat, 2006). The activation of the PMC inhibits the tonically-activated guarding reflexes, resulting in the simultaneous relaxation of the internal urethral sphincter and parasympathetically-mediated contraction of the bladder muscle to expel urine (Figure 3; DeGroat, 2006; Ferguson & Christopher, 1996). Coordination between these neural pathways ensures that urine is excreted through the urethra without resistance.

## II. Overactive Bladder Syndrome

In this section, the research literature regarding the prevalence, clinical assessment, diagnosis, treatment, and socio-psychological impact of OABS (dry and/or wet) is reviewed. Unless otherwise specified, the symptom of UI in the text below refers to urine leakage associated with urinary urgency. UI may also occur with changes in abdominal pressure due to cough, sneeze, laugh, physical exertion, or

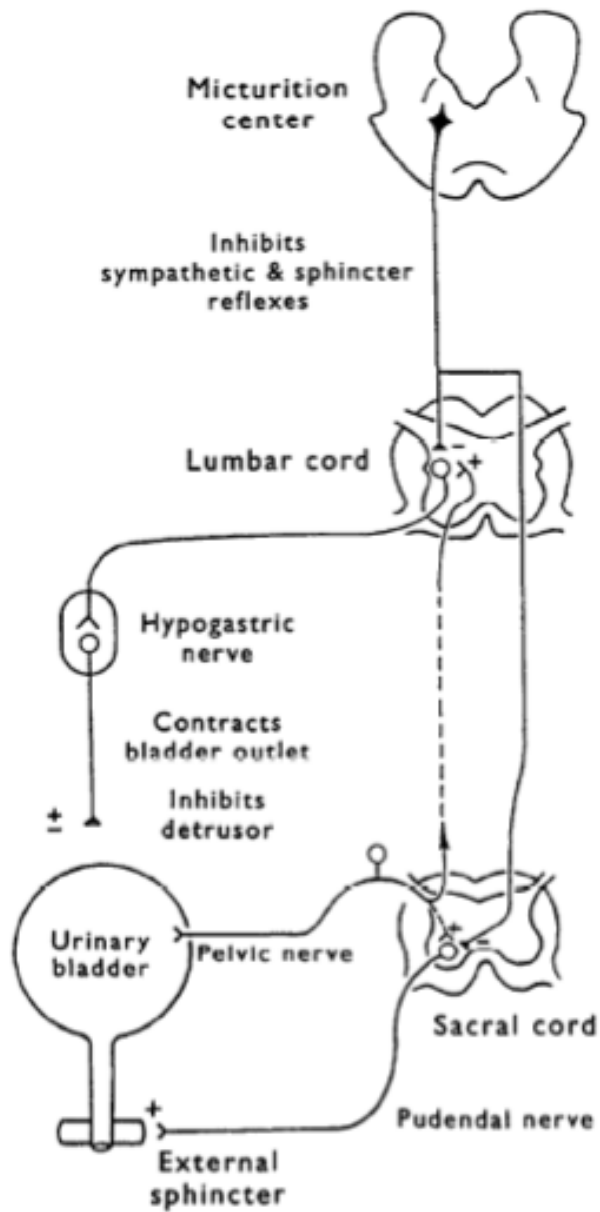


Figure 3: Illustration of the neural pathways connecting the brain, bladder, and spinal cord. These pathways facilitate urine storage reflexes. Reprinted with permission from John Wiley & Sons. (DeGroat, 2006, p. S31)



shifts in posture and in these cases, the symptom pattern is referred to as stress UI (SUI; Abrams et al., 2003; Abrams et al., 2009; Fantl et al., 1996; Wein & Rovner, 2002). A mixed pattern of urinary incontinence (MUI) may also occur, where UI is associated with both urinary urgency and changes in abdominal pressure and any references to studies regarding MUI are clearly demarcated (McGuire, 2000). Given the nosologic revision of bladder storage disorders in 2002, the diagnosis of OABS (dry or wet) was not expected to appear in the urological literature published prior to this date. When articles prior to 2002 were required in this literature review, they were identified using the historically equivalent term for OABS, idiopathic urge UI.

*i. Frequency of Urinary Urgency and Other OABS symptoms*

Estimates of the frequency of OABS symptoms in everyday life, including micturitions (i.e., voids), urinary incontinence, and the volume of urine per void, have been obtained through the use of frequency-volume charts or voiding diaries in a number of empirical biomedical studies. As demonstrated in Table 3, patients diagnosed with OABS-wet (or UUI), on average, experience three or more episodes of UI per day and urinate approximately 150 to 200 ml of urine eight to eleven times per 24-hour period (Barkin et al., 2004; Corcos et al., 2006; Kassis & Schick, 1993; Larsson & Victor, 1988; Naoemova, DeWachter, & Wyndaele, 2008; Pauwels,

DeWachter & Wyndaele, 2004; Poole & Yates, 1975). In comparison, as noted in Table 4, healthy volunteers void 250 to 300 ml approximately 5 to 7 times per 24-hour period (Kassis & Schick, 1993; Larsson & Victor, 1988; Naoemova et al., 2008; Pauwels et al., 2004; Poole & Yates, 1975). Note that, by definition, any UI or urine leakage is considered abnormal and thus, not present in the samples of healthy or asymptomatic volunteers (i.e., Table 4).

Given the difficulties assessing urinary urgency as described in the first chapter, few empirical studies have assessed the frequency of urinary urgency in patients diagnosed with OABS. In one study, Corcos et al. (2006) reported a mean daily frequency of  $4.9 \pm 2.9$  episodes of urinary urgency in a group of 50 OABS-wet patients, who also reported  $3.2 \pm 3.1$  UI episodes/day and  $10.6 \pm 3.8$  micturitions/day. A second study reported a lower frequency of urgency in patients diagnosed with OABS (n=21), with 43% of the study sample reporting the symptom less than one episode per day on average, and some patients had days where they did not experience urinary urgency at all (Yamaguchi et al., 2007). The results of these studies demonstrate that patients diagnosed with OABS-wet experience sporadic episodes of urine leakage, amongst periods in which urination occurs normally (i.e., without leakage).

Table 3: Summary of Selected Studies Evaluating Mean (SD) 24-hour Void Frequency, Urine Volume Per Void, and Total Urine Voided per 24 hours in Patients with Bladder Storage Dysfunction

	Study						
	Barkin et al. (2004)	Corcos et al. (2006)	Diokno et al. (2003)	Choo et al. (2008)	Naoemova et al. (2008)		
	UUI	UUI	OABS	OABS	SUI	UUI	MUI
Sample Size	53	77	391	107	97	67	60
Age (y)	58 (12)	58 (12)	60	52.7 (11)	54 (1.3)	58 (1.9)	55 (2.3)
Fluid Intake (ml)					1676 (75)	1637 (80)	1708 (81)
Urine Volume Voided (ml/24h)					1858 (89)	1588 (93)	2010 (106)
Void Frequency (#/d)	11.4 (2.9)	10.6 (3.8)	94.8 (25) <sup>Ω</sup>	11.3 (2.8)	8.2 (0.3)	8.7 (0.4)	9.2 (0.5)
UI Episodes (#/d)	24.3 (19) <sup>Ω</sup>	3.2 (2.5)	43.3 (2.5) <sup>Ω</sup>	1.9 (2.2) <sup>Ω</sup>			
Urine Volume Per Void (ml/void)	177 (77)	205 (91)		147 (51)			

Shaded areas indicate data not available. <sup>Ω</sup> indicates episodes per week. UUI: urge UI, OABS: Overactive Bladder Syndrome, SUI: stress UI, MUI : mixed UI

Table 4: Summary of Selected Studies Evaluating Mean (SD) 24-hour Void Frequency, Urine Volume/Void, and Urine Voided per 24 hours in Healthy Adult Volunteers

Urinary Parameter	Study						
	Pauwels et al. (2004)			Larsson & Victor (1988)	Naoemova et al. (2008)	Kassis & Schick (1993)	
Sample Size	24			151	27	33	
Age (y)	49 (6)			43	50 (1.1)	39.7	
Fluid Intake (ml)					1943 (142)		
Urine Volume Voided (ml/ 24 hours)				1430 (487)	1938 (139)	1473 (386)	
	Day	Night	Day + Night	Day + Night	Day + Night	Day	Night
Void Frequency (# voids/day)	6.5	0.07	6.7	5.8 (1.4)	6.8 (0.3)	5.6 (1.3)	0.08 (0.2)
Time Interval Between Voids (minutes)						222 (60)	454 (50)
Urine Voided Volume (ml/void)	289 (178)	450 (189)	294 (180)	250 (79)		237 (67)	379 (132)

Shaded areas indicate data not available.

*ii. Prevalence, Natural History and Economic Burden*

*Prevalence*

Epidemiological studies of community-dwelling individuals in Canada, the United States and European countries, with samples ranging from 2,000 to 19,000 participants, have reported overall OABS point-prevalence between 11 and 19% (Corcos & Schick, 2004; Irwin et al., 2006; Milsom et al., 2001; Stewart et al., 2003; Temml, Heidler, Ponholzer, & Madersbacher, 2005). Overall point-prevalence of OABS was similar in males and females in three studies (Irwin et al., 2006; Milsom et al., 2001; Stewart et al., 2003) or slightly higher in females compared to males in two studies (21.2% vs. 14.8%, Corcos & Schick, 2004; 16.8% vs. 10.2%, Temml et al., 2005). ). When examined across age strata, the point-prevalence of OABS increased with age in both sexes (Milsom et al., 2001; Stewart et al., 2003; Temml et al., 2005). Corcos and Schick (2004), as well as Temml et al. (2005), reported a point-prevalence of OABS-dry that was greater than OABS-wet (13.6% vs. 2.3% and 9.4% vs. 4.1%, respectively), whereas Stewart et al. (2003) reported the opposite pattern (OABS-dry less than OABS-wet, 6.1% vs. 10.4%). Together, the studies suggest that OABS prevalence increases with advancing age, with slightly higher overall point-prevalence in females compared to males.

Evaluation of OABS subtypes by gender revealed that males had a greater point-prevalence of OABS-dry compared to OABS-wet (11.7% vs. 1.8%, Corcos & Schick, 2004; 13.4% vs. 2.6%, Stewart et al., 2003; 8.4% vs. 1.8%, Temml et al., 2005). In females, the comparison of prevalence in OABS-dry to OABS-wet was more variable (15.6% vs. 2.6%, Corcos & Schick, 2004; 7.6% vs. 9.3%, Stewart et al., 2003; 10.3% vs. 6.5%, Temml et al., 2005). Examination of the gender-specific prevalence of OABS subtypes across different age groups revealed that the prevalence of OABS-wet increased in females, from 2% in the 25-34 year age category to 19% in the 75+ year age category for females, compared to males, from 0.3% to 9% (Stewart et al., 2003). An opposite pattern was noted for OABS-dry; OABS-dry increased steeply in males, from 6% in the 25-34 year age category to 22% in the 75+ year age category, compared to females, from 4% to 9% (Stewart et al., 2003). In summary, OABS-dry is generally more prevalent than OABS-wet, but the pattern differs according to gender. OABS-dry is more prevalent in males, whereas OABS-wet is more prevalent in females.

A consistent limitation of these epidemiological studies resides in the use of structured questionnaires to assess LUT symptom frequency consistent with an OABS diagnosis rather than ascertaining the prevalence of the OABS diagnosis in clinical/medical populations. In the majority of studies conducted, data was collected in a community-based population using computer-assisted telephone interviews. Interviewers administered a structured questionnaire regarding the presence of urinary

symptoms and demographic information. The OABS prevalence estimates reported in these publications were extrapolated from the frequencies of LUT symptoms reported in interviews without in-person urological diagnostic assessment (Corcos & Schick, 2004; Irwin et al., 2006; Milsom et al., 2001; Stewart et al., 2003). Since OABS is a medical diagnosis, which is usually given after a clinical examination by a physician, the characterization of these studies as estimates of OABS prevalence may be misleading to readers, since they seem to imply that the estimates are diagnostic. As noted by McGuire (2000, p. 47), “symptoms are not a diagnosis”, and there is a widely-recognized, empirically-validated, near zero correlation between patient reports of LUT symptoms and the ultimate diagnosis based on full clinical and urodynamic assessment (Brubaker, Chapple, Coyne, & Kopp, 2006; Jackson, 1997; McGuire, 2000). Moreover, the results of the Milsom et al. (2001) study may have overestimated OABS prevalence due to the use of broad criteria to classify OABS cases. Specifically, Milsom et al. required the presence of only one OABS symptom for classification as a case, instead of the symptom combinations required for diagnosis (e.g., urgency with increased void frequency, urgency with UI). Given these limitations, the findings of these epidemiological studies are best considered to be frequency estimates of LUT symptoms in the general population, rather than interpreted as estimates of OABS prevalence. Future research in this area would be strengthened by the examination of OABS frequency in clinical samples using complete diagnostic procedures as part of the research methodology.

### *Natural History*

With respect to the natural history of OABS, there are few empirical longitudinal studies of symptom progression over time, either with or without pharmacotherapy (Serels, 2004). However, investigations of symptom progression and rates of remission have been conducted for community-dwelling adults with UI (Milsom, 2009). Generally, empirical studies have demonstrated that UI is a dynamic rather than static condition (Herzog, Diokno, Brown, Normolle, & Brock, 1990; Milsom, 2009). In one multiple-year survey study of 1,956 non-institutionalized adults over 60 years of age, Herzog et al. (1990) reported that females had higher one-year incidence rates of UI (37.7% vs. 18.9% in men) and lower remission rates compared to males (12% vs. 30%). These divergent patterns of change in the female and male samples were attributed to differences in UI etiologies. For example, UI in males is often secondary to prostatism, a condition that is responsive to treatment, whereas in females, UI is secondary to involuntary bladder contractions and loose pelvic musculofascial attachments, which are more complex and require longer timeframes to treat (Herzog et al., 1990).

Moreover, there is widespread recognition in the medical community that UI and OABS often remain undiagnosed and untreated. Social stigma, lack of awareness of UI as a medical condition and the presumption that urinary-related problems are a normal part of female aging associated with childbearing have been identified as key



factors impeding health services utilization (Hale, Grogon & Willott, 2009; Klyman, 2004; Rosenberg, Newman, Tallman, & Page, 2007). As a result, adults with LUT symptoms, such as urinary urgency and UI, often struggle with symptoms for long periods of time before seeking medical care. In a population-based prevalence study of men and women over 40 years of age in six European countries, Milsom et al. (2001) reported that of the 1,916 participants who identified OABS symptoms, 40% had not spoken with a doctor about their condition, and of the participants who had spoken with their doctor, 73% had never tried medication.

### *Economic Burden*

To date, there have been wide-ranging estimates of the economic burden of OABS in Canada and the United States, depending upon the economic model employed. It is generally agreed that nursing home admissions are a potent contributor to the overall economic cost of OABS, in addition to the reductions in work productivity associated with absence from work (absenteeism) and inability to conduct work on the job due to symptoms (presenteeism; Coyne et al., 2008; Kannan Radican, Turpin, & Bolge, 2009; Klyman, 2004). The annual cost of OABS in community-dwelling adults in the United States is estimated to fall in the range of \$24.9 billion to \$36.5 billion, based upon a conservative and liberal estimate of OABS prevalence, respectively (Onukwugha et al., 2009). Costs of drug therapy, inpatient medical services and

outpatient medical services (e.g., office and emergency visits, lab tests) were included in the model. By 2025, healthcare costs related to UI are expected to increase significantly, due to an anticipated increase in the number of OABS cases increasing from 33 million adults to over 52 million adults in the U.S. (Litman & MacKinlay, 2007).

There are several limitations in studies estimating the economic burden of OABS. The first is a restricted focus on societal costs due to medical services utilization without considering costs incurred by the patient diagnosed with OABS, including absorbent pads, laundry costs and more frequent health care visits. In addition, there are significant costs associated with the long-term interference in daily functioning of OABS sufferers, including social, interpersonal, emotional, occupational and/or sexual activities, which cannot be represented in economic modelling<sup>2</sup> (DuBeau Levy, Mangione, & Resnick, 1998; Irwin, Milsom, Kopp, Abrams, & Cardozo, 2005; Kannan et al., 2009). Lastly, some of these studies may have overestimated the economic costs associated with OABS. As noted in an earlier section, there is variability amongst studies with respect to the number of criteria employed to delineate OABS cases based on estimates of LUT symptom frequency in study samples. Several of the economic models used less stringent criteria which may have inflated prevalence estimates, and therefore, inflated care cost estimates. Economic

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<sup>2</sup> The socio-psychological impact of OABS is reviewed later in this chapter.

models would be strengthened by the availability of prevalence estimates of actual OABS diagnoses in clinical samples, rather than the reliance upon frequencies of LUT symptoms.

*iii. Clinical Assessment and Diagnosis*

Clinical assessment is an essential component in the medical management of OABS, and is usually performed by urologists, urogynecologists and/or gynecologists. The symptoms of urinary urgency, voiding disturbances (e.g., hesitancy, poor stream), increased micturition frequency and/or UI, may be related to the presence of neurological, non-neurological (e.g., obstructive), and metabolic diseases, anatomical changes, bowel habits and constipation, and use of medications (i.e., diuretics). Medical assessment employs a variety of procedures examining the anatomical, structural, and functional aspects of the lower urinary tract, including the bladder, urethra, colon, pelvic floor muscles, vagina and uterus, which assist in identifying contributing factor(s) and making recommendations regarding the type and sequence of treatment(s) (Figures 1 and 2; Borrie & Valiquette, 2002; DeGroat, 1997; Dolan & Hilton, 2003; Gormley, 2007; Mostwin, 2002). OABS is a symptom-based syndrome and its diagnosis is given only after the neurological, non-neurological (infectious, malignant, obstructive) and metabolic causes of LUT symptoms have been ruled out (Dr. William Love, personal communication, June

2009; Blaivas, 2007; Wein, 2003). This pattern of symptom presentation has been observed in up to 40% of medical patients presenting for assessment of LUT symptoms (Jarvis, 1982; Flisser & Blaivas, 2002; McGuire, 2000; Oliver et al., 2003).

In the first phase of medical assessment, specialists routinely employ less invasive methods of interviewing, physical examination of the urogenital area, and tests of blood chemistry and urine biochemistry/cytology. Often, physicians request that the patient complete a frequency-volume diary for one to three days, in which the time and amount of each void, as well as the number of episodes of UI and urinary urgency are recorded (Dolan & Hilton, 2003; Wein, 2003). Observations made during the physical examination assist urologists in the procedure of differential diagnosis so that contributing factor(s) may be identified. For example, pelvic organ prolapse and weakened pelvic floor muscles may be contributing factors in LUT symptoms, however surgery may be indicated in the former, whereas pelvic floor muscle strengthening is indicated in the latter (Gormley, 2007; Figure 2).

In the second phase of medical assessment, specialists employ more invasive medical tests to investigate the structure and function of the bladder and urethra. Collectively referred to as urodynamic investigations, a variety of tests may be performed to identify pathologies in the urinary system. One type of urodynamic investigation is conventional cystometry, in which the bladder is filled with a saline solution via catheter to investigate the pressure-volume relationships in the bladder during the filling, storage and voiding phases, as well as to attempt to reproduce the

urinary symptoms (e.g., urinary urgency or UI; Wein, 2003). Another type of urodynamic investigation is video fluoroscopy, where the bladder and urethra may be visually inspected for evidence of structural abnormalities that suggest obstruction and/or tumors (Flisser & Blaivas, 2002). Observations made during these procedures assist in the differential diagnosis - for example, in conventional cystometry, the presence of involuntary detrusor contractions (IDCs) may be observed on electrical recordings while the bladder is filling (i.e., detrusor instability). Detrusor instability may be classified as neurogenic, when the medical history and clinical presentation is consistent with a neurological disease, or idiopathic, when there is no evidence of a neurological component (Abrams et al., 2003; Milsom et al., 2001). Routine use of conventional cystometry is a matter of ongoing debate in urology<sup>3</sup> (Flisser & Blaivas, 2002; Malone-Lee & Al-Buheissi, 2009); however, the decision to use these tests is influenced by clinical need, availability of time and institutional resources (Wein, 2003).

During conventional cystometry, specialists also evaluate the presence of sensation in the lower urinary tract. According to ICS guidelines, three sensations are recognized: physiological (related to filling/urination), pathologic (urinary urgency,

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<sup>3</sup> Although involuntary bladder contractions are considered a primary cause of UI, particularly in women (Herzog et al., 1990), there is ongoing debate on this topic. Studies have demonstrated that the bladder is in a continuous state of activity, and there is an inconsistent relationship between detrusor instability (IDCs) and the experience of urinary symptoms (Coolsaet & Blaivas, 1985). As a result, the use of routine cystometry has been questioned. However, there is favorable opinion regarding the utility of cystometry in patients with neurological presentations, given the risk to the upper urinary tract (i.e., kidney damage) over the long term.

pain), and externally-induced (touch, temperature) (Wyndaele, 2006; Wyndaele & DeWachter, 2008). As the bladder is filled with saline through a urethral catheter, physiological information is recorded (i.e., urine volume, abdominal pressure) and patients are asked to report when they perceive sensations related to bladder filling. Specialists use three standardized terms to categorize patient responses (Table 5). The presence and quality of each sensation and the urine volume at which they occur during cystometry may be compared to empirical data recorded in the frequency-volume chart where voiding and incontinence have occurred outside of the medical clinic (Abrams et al., 2003; Fantl et al., 1996; Scientific Committee of the First International Consultation on Incontinence, 2000; Wein, 2003). These data provide an informative comparison between urinary function under standardized conditions and daily life. However the information is not considered diagnostic due to the high levels of variability in mean urine volumes for each category of sensation (e.g., standard deviations of 150 ml or more) and concerns that the test may elicit sensations or other physiological data not representative of daily life due to a non-physiological rate of filling (Wyndaele, 1991). The evaluation of the perception of bladder sensations as present or absent during bladder filling is also clinically meaningful, as its absence may be suggestive of a neurological problem (Wein, 2003; Wyndaele, 2006). Patients who have conditions in which bladder sensations are completely absent, such as spinal injuries, will not receive a diagnosis of OABS (Abrams et al., 2012).

Table 5: Standardized Definitions of Bladder-Related Sensations during Conventional Cystometry (Abrams et al., 2003, p. 43).

<b>Bladder-Related Sensation</b>	<b>Definition</b>
First sensation of bladder filling (FSF)	the feeling the patient has, during filling cystometry, when he/she becomes aware of the bladder filling
First desire to void (FDV)	the feeling, during filling cystometry, that would lead the patient to pass urine at the next convenient moment, but voiding can be delayed if necessary
Strong desire to void (SDV)	during filling cystometry, is a persistent desire to void without the fear of leakage

*iv. Treatment in Medical Settings*

Clinical management guidelines for bladder storage dysfunction suggest a three-tiered approach in the treatment of OABS (Dolan & Hilton, 2003; Wein, 2003). The mainstay of treatment is a trial of oral anticholinergic agents that mitigates the parasympathetic nerve activity mediating contractions of the bladder muscle (Andersson et al., 2001; Andersson & Yoshida, 2003; Hashim & Abrams, 2007). Over the last decade, novel drug delivery methods have been developed, including the use of intravesical delivery of anticholinergics directly into the bladder, as well as anticholinergic transdermal patches (Wein, 2003). According to Hashim and Abrams (2007), the clinical utility of antimuscarinic agents is limited by adverse side effects, including dry mouth and constipation, and novel agents are under investigation to determine whether the balance between efficacy and side effects might be improved (Hashim & Abrams, 2007). A novel agent, resinaferatoxin, can be instilled directly into the bladder for the purposes of sensory nerve de-afferentation, which reduces the level of sensory input from the bladder to the brain.

In rare cases of severe bladder dysfunction, surgical treatment, such as neuromodulation, peripheral bladder denervation, and/or augmentation cystoplasty, may be considered. Typically, surgery is recommended for medical patients who have neurological factors in their clinical presentation, whereas patients diagnosed with OABS are treated more conservatively with medication and behavioral



treatments. Neuromodulation involves the surgical implantation of an electrical device that stimulates the sacral nerves to inhibit bladder overactivity. This procedure has a low success rate, however, and therefore, a preliminary trial with a percutaneous sacral stimulating device is usually conducted to determine patients' responsiveness prior to the surgery. The other two surgical options, peripheral bladder denervation and augmentation cystoplasty, are rarely employed by urologists due to the risk of serious complications, including high relapse rates and complete organ failure (Wein, 2003).

In addition to prescription medications, behavioral modification is also recommended to medical patients diagnosed with OABS as a primary line of therapy (Burgio, Locher, & Goode, 2000; Wein, 2003). Behavioral modification is an overarching term describing numerous practices, including bladder education, pelvic floor exercises (e.g., Kegels), breathing exercises, exposure to visual cues that trigger an urge to void and postponement strategies (mental distraction, pelvic muscle contraction), reducing dietary triggers (i.e., alcohol, caffeine), scheduled voiding (i.e., bladder drill), use of bladder diaries to increase time intervals between voids (timed voiding), and anorectal biofeedback/electrical stimulation to identify and strengthen pelvic floor muscles (Fantl et al., 1996; Burgio, 2004; Hashim & Abrams, 2007; Millard & Oldenburg, 1983; Payne, 2000). The overall goal of treatment is to introduce longer time delays between experiencing the urge to urinate and actual urination (Payne, 2000).

Although the development of behavior therapy is often credited to William K. Frewen, a British gynecologist (Payne, 2000), behavioral approaches to treat bladder storage dysfunction were introduced into medical clinics at least a decade earlier (Jeffcoate & Francis, 1966). Initially, in-patient hospitalization was adopted as the setting for behavioral interventions given the need for regular monitoring, encouragement and reinforcement of new voiding routines, although this practice has been discontinued and services are now provided for out-patients only (Millard & Oldenburg, 1983; Payne, 2000). At present, nurse continence advisors, with specialized training and certification in the field of urology, work alongside urologists to provide behavioral modification in continence clinics (Burgio, 2004; Fantl et al., 1996; Farrell et al., 2009). Clinical health psychologists have advocated for their involvement in UI research and treatment, particularly to support patients' psychological and physical health via coping and management of ongoing interruptions and anxiety/self-doubt associated with this chronic, debilitating condition (Tovian et al., 1994). However, there are few publications regarding the clinical practice of health psychologists in bladder storage disorders (Perry, McGrother, Turner, & the Leicestershire MRC Incontinence Study Group, 2006), suggesting that few psychologists have taken up applied health psychology practice in this area. While support for the adoption of cognitive-behavioral therapy into standardized bladder retraining programs has been indicated, medical practitioners

have advocated training for existing nursing staff rather than recruiting the services of clinical psychologists (Hunt, 1996).

In summary, the current model of treatment for OABS in medical settings seeks to identify the biological (e.g., neurological, anatomical, metabolic) factors causing symptoms as primary targets for intervention. Pharmacological treatment is augmented with attention to behavioral, coping and lifestyle modifications that influence the frequency and impact of symptoms (Dunlop, 1979). Some nursing professionals offer behavioral treatment as part of the services offered in continence clinics (Farrell et al., 2009), but these resources may be difficult for patients to access due to their scarce availability in Canadian communities (Fantl et al., 1996; Payne, 2000; Scientific Committee on the First International Consultation on Incontinence, 2000). Overall, the goals of intervention are directed towards reducing the frequency and bother of symptoms, and improving health-related quality of life.

*v. Social and Emotional Impact*

Over the last decade, numerous empirical research studies have been conducted to examine the social and emotional impact associated with the symptoms of Overactive Bladder Syndrome. A variety of methodologies have been employed, including quantitative analyses of the frequency of medical and psychological co-morbidities and the level of quality of life functioning in samples of OABS patients,

as well as qualitative inquiries regarding the personal, cultural and social meanings associated with the experience of symptoms in daily life. To a large extent, this research was published prior to the establishment of OABS as a diagnosis in 2002, and therefore, many of these studies focus upon the experience of UI, rather than urinary urgency. However, given that the present study sought to investigate the lived experience of urinary urgency in women who have experienced UI, a review of prior literature regarding the experience of UI was considered pertinent. In this next section, a comprehensive review of these research studies is presented.

Medical and epidemiological approaches have investigated the co-morbidity of physical health problems associated with urinary urgency and incontinence. Brown et al. (2000) assessed the incidence of falls and fractures in a sample of community-dwelling women with UUI and reported that older women with urinary urgency and UI had an increased incidence of orthopedic fractures. These fractures were attributed to falling due to loss of stable footing or balance while rushing (i.e., running) to the toilet to urinate. In addition, women diagnosed with OABS have an increased prevalence of skin ulceration associated with chronic urine leakage (that makes prolonged contact with skin or pads), as well as recurrent, severe urinary tract infections (Serels, 2004). Urinary tract infections (UTIs), although ordinarily not life-threatening, may be associated with other medical complications such as kidney infections and chronic kidney damage (Thomas & Tolley, 2008), as well as acute delirium in older populations (American Psychiatric Association, 2000).

The association between UI and the presence of depressive disorders has been investigated in community-dwelling adults. There is modest evidence that UI is associated with greater prevalence of major depression (Vigod & Stewart, 2006). Using data from the Canadian Community Health Survey, Vigod and Stewart (2006) noted that the prevalence of major depression was significantly greater in women with UI (16%) compared to women without UI (9%; n=69,003). The increased prevalence was greatest in younger age groups (women aged 18 to 44 years), but was also observed in women over 45 years of age. Vigod and Stewart (2006) reported that women with co-morbid UI and depression were less likely to be married and more likely to have middle or high levels of income.

The association between UI and the presence of anxiety disorders is more complex. A longitudinal study of anxiety disorders in community-dwelling adults 50 years or older, Bogner, Gallo, Swartz, and Ford (2002) reported no significant difference in the prevalence of anxiety disorders in respondents reporting the presence or absence of UI (n= 787). However, additional analyses revealed that respondents with UI-related functional loss were more likely to meet criteria for an Anxiety Disorder compared to respondents without UI, suggesting that individuals with UI and co-morbid psychological disorders may experience more functional disturbance and need intervention compared to individuals with UI alone. Furthermore, Bogner et al. (2002) conducted longitudinal analyses to examine the relationship between UI-related functional loss and anxiety disorders over a thirteen year period in persons

who reported UI (n= 154). When compared to persons who never met criteria for any Anxiety Disorder, persons with chronic anxiety disorders were more likely to report UI-related functional loss whereas persons with remitted anxiety disorders were not. These data suggest that the presence of an anxiety disorder may increase the risk of psychosocial impairment in persons over 50 years of age who suffer from UI.

Lastly, researchers have also investigated the relationship between LUT symptom severity and the presence of anxiety or depressive symptoms. Watson, Currie, Curran, and Jarvis (2000) conducted a prospective study in 133 urological patients of UI and reported no significant difference in LUT symptom severity in medical patients with and without depressive symptoms. The authors reported significantly less urinary symptom severity in medical patients with co-morbid anxiety compared to patients without anxiety, suggesting that co-morbid anxiety may be a strong motivator to seek UI treatment. Note, however, a high rate of patient withdrawal was reported in the Watson et al. (2000) study; 68% of enrolled study participants did not complete the study (90 out of 133 patients). As a result, selection bias may limit the generalizability of these results to the overall population of medical patients presenting for UI assessment and treatment.

The relationship between psychological distress and UI has also been examined in community-dwelling adults. Burgio, Locher, Roth, and Goode (2001) examined levels of psychological distress in ambulatory, community-dwelling women aged 55 years and older undergoing behavioral and drug treatment for UUI using the

Symptom Checklist-90-Revised (SCL-90-R), a 90-item questionnaire assessing psychological symptoms organized into nine clinical scales, including interpersonal sensitivity, somatization, depression, anxiety, and hostility, as well as a general index score. Burgio et al. (2001) reported that 75% of all patients enrolled in the study were within the normal range (T scores less than 63) on all nine SCL-90-R clinical scales at baseline, suggesting that psychological distress was not predominant in this sample of medical patients. Highest mean levels of psychological distress were noted on the obsessive-compulsive subscale, with 33% of all patients scoring in the clinically significant range at baseline. In another study, psychological well-being was examined in a stratified area probability sample of males and females aged 60 years and older in a county of Michigan (n=1,288) (Herzog, Fultz, Brock, Brown, & Diokno, 1988). Four measures of psychological well-being were employed in the study: the Bradburn Affect Balance scale, a depression measure, a question about current happiness, and a question on life satisfaction. Herzog et al. (1988) reported significantly greater negative affect in incontinent males and females compared to continent males and females, respectively, but these effects accounted for only 2 to 4% of the variance in psychological well-being. Overall, the authors concluded that the study findings did not support the widely-reported presumption that UI is associated with severe or broad-based psychological distress.

Other investigators have taken a different approach to the examination of psychological distress and UI. Bogner, Gallo, Sammel et al. (2002) used the General

Health Questionnaire to examine psychological distress in adults 50 years of age and older (n=781), which inquired about the severity of somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Multiple logistic regression analyses indicated that persons with UI were more likely to report psychological distress compared to persons without UI, but these findings did not remain significant after being adjusted for chronic medical conditions and impairment in activities of daily living (i.e., indicators of general health status). However, persons who reported UI-related functional loss were more likely to report psychological distress than persons without UI, and these results remained significant after adjusting for age, gender, ethnicity, education, chronic medical conditions, and impairment with activities of daily living. Bogner, Gallo, Sammel et al. (2002) asserted that the relationship between UI and psychological distress is complex, and related, at least in part, to general health status. That is, persons who report UI and higher psychological distress have poor general health due to other illnesses and/or disability compared to persons reporting continence and low psychological distress. However, the data reflect the role of UI-related functional loss (e.g., inability to enjoy daily activities and social interactions due to UI) as a mediator of the relationship between UI and psychological distress, which may have utility in identifying persons in greatest need of psychological intervention.

In addition, numerous quantitative studies employing health-related quality of life (HRQoL) questionnaires have converged upon the finding that OABS is



associated with a significant negative impact in all domains of functioning (Donovan et al., 2002). Liberman et al. (2001) conducted a telephone-based study of 4,896 community-dwelling adults 18 years of age and older and reported that participants with symptoms of OABS-wet had significantly lower scores on the health perception and role function domains of a generic HRQoL questionnaire, the Medical Outcomes Study Short Form (SF-20), compared to non-OABS controls. In the same study, OABS-dry was associated with significantly lower scores on the mental health, health perception and bodily pain domains of the SF-20 compared to non-OABS controls (Liberman et al., 2001). In another study, mean scores on measures of physical, mental and social functioning of the Medical Outcomes Study-Short Form-36 were significantly lower in patients diagnosed with OABS compared to non-OABS age-matched controls, and also lower than patients with diabetes and hypertension (Abrams Kelleher, Kerr, & Rogers, 2000). Cohen, Barboglio, & Gousse (2008) examined the sexual functioning of women with UI (i.e., mixed UI and OABS-wet) using the female sexual function index (FSFI), a validated questionnaire assessing desire for sexual activity, sexual arousal, lubrication, orgasm, satisfaction and pain. Cohen et al. (2008) reported that the presence of UI (e.g., OABS-wet) was associated with significantly lower sexual functioning in women compared to OABS symptoms without UI (i.e., OABS-dry).

Moreover, the development of HRQoL questionnaires that specifically evaluate the impact of OABS symptoms in daily life has facilitated additional

empirical investigations (Donovan et al., 2002). For example, Van der Vaart, De Leeuw, Roovers, & Heintz (2002) documented a significant negative impact in social functioning, physical mobility and emotional functioning as measured by the Incontinence Impact Questionnaire (IIQ) in medical patients diagnosed with OABS-dry and OABS-wet. As well, Coyne et al. (2008) reported a similar negative impact in OABS-wet and OABS-dry groups in a nested case-control study of over 2800 adults using the OAB-q, a validated and specific measure of HRQoL associated with OABS symptoms. Previously, urinary urgency and UI were reported to be the first and second largest contributors accounting for the variability in OAB-q symptom bother and coping scores (after controlling for age, sex and co-morbid conditions, n=919; Coyne et al., 2004). With respect to the occupational functioning of individuals diagnosed with OABS, study participants reported significant difficulties managing their illness in the workplace, including concerns about interruptions to meetings and that urine leakage might be noticed by co-workers (Irwin et al., 2005). In some cases, women reported that their difficulties in the workplace were so disturbing that they chose at-home employment or gave up employment altogether (Hale et al., 2009). Taken together, the results of these studies demonstrate the significant negative impact associated with OABS symptoms on the social, emotional, occupational and physical functioning in adults.

Turning attention to studies employing qualitative methodologies, the experiences of women living with UI have been examined from the psychological, as

well as sociological and anthropological, perspectives. With respect to the latter, two studies are important in the context of the present dissertation (Mittiness & Barker, 1995; Peake & Manderson, 2003). Peake and Manderson (2003) investigated the role of the construction of femininity influencing women's experiences of UI using a thematically-coded feminist analysis drawing upon the interview data of 75 women. The authors highlighted several important contradictions in the understanding and management of UI,

“The most striking aspects of UI are its contradictions and ambiguities. It is a condition that is regarded as normal, yet is embarrassing, it is extremely common, yet unable to be talked about...biologically grounded, yet subject to *self*-control...” (p. 40, italics in original).

They go on to state,

“The ideal is that individuals are in control of their bodies. Urinary incontinence contradicts this. Managing UI is critical for women to maintain their self-identity as competent adults... (p. 41).”

Peake and Manderson (2003) emphasized that the impact of UI on individuals is, in part, related to widespread cultural norms of restraint and control, and therefore, individuals with UI must “devise ways, and adhere, to social rules to manage a leaky body” (p. 37). As a result, a number of self-help methods are used to control, treat and disguise symptoms (Hale et al., 2009). Similarly, in a large-scale multiple-phase anthropological study of community-dwelling geriatric individuals, Mittiness and

Barker (1995) argue that incontinence is culturally linked to incompetence, which leads individuals to “manage their condition in ways that will not compromise their competence in the eyes of others” (p. 188). They go on to state that, “continence has a broad meaning of self-restraint or abstinence... and loss of continence has moral consequences that go far beyond physiological impairment to cast strong doubt on a person’s social competence.” (p. 189). The authors also emphasized that incontinence is a “cultural symbol for the increasing dependencies of old age” (p. 188), and as a result, maintaining bladder control is tantamount to “maintaining a sense of self” (p. 206). Together, the results of these cultural and anthropological approaches have highlighted a connection between women’s experiences of UI and their sense of selfhood (identity) and competence.

Qualitative studies have also been utilized to investigate the impact of UI on various domains of functioning in females. Hägglund and Ahlström (2007) conducted a phenomenological hermeneutic analysis of 14 women’s experiences with UI. The authors identified two major themes, including “being in a vulnerable situation”, and their “striving for adjustment”. Study participants experienced their bodies “as-uncontrollable”, and reported feelings of powerlessness and desperation when urine leakage started and they were unable to stop it. A state of lived readiness was described – everyday involved planning to avoid UI and frequent toileting to keep the bladder empty of urine. Women strove for a way to make UI comprehensible for themselves and for others, with some participants explaining UI in terms of a history

of childhood bed-wetting, while others referred to childbirth, advancing age and being overweight. Overall, the authors concluded that women with UI were striving to adjust to live with UI and to reduce feelings of vulnerability and regain their sense of personal power.

In another study, Ashworth and Hagan (1993) used a modified phenomenological analysis to probe women's experience of UI, attitudes to her body, and impact of UI on daily activities. The sample consisted of 28 transcripts with the female participants ranging in age between 25 to 55 years of age. The authors identified three main ways that sufferers continually attended to their experiences. First, sufferers described a vagueness of the problem, and seemed to search for a framework to discuss it. Some participants "did not even have a word they could confidently use to refer to their problem..." (p. 1418). Also, the authors reported that participants often felt the condition was their own fault, that they did not warrant the respect of others, and some "turned away from their own bodies and themselves in disgust" (p. 1420). Special precautions to avoid leakage often become a daily part of life, including frequent urination, route planning around toilet locations, "safe" outings, vigilance to bladder fullness and fluid intake, and use of absorbent pads. In particular, participants reported experiencing fear of having UI detected by others, and the social rejection that may ensue.

Qualitative studies have also demonstrated the profound impact of OABS on women's intimate relations and social functioning within the familial unit. In a focus

group study with female OABS sufferers (n=34), Coyne et al. (2007) described the presence of reduced sexual desire, avoidance of orgasm due to fear of UI, unwillingness to relax during sexual activity, and a negative impact upon their sense of femininity and desirability. Focus group interviews with spouses and family members of OABS sufferers revealed the significant psychosocial limitations that loved ones endured. Family members reported significant limitations in everyday activities (e.g., travel, social activities), sleep disruption and emotional reactions (e.g., anger, worry, frustration) due to the symptoms encountered by their partner or parent (Coyne, Matza, & Brewster-Jordan, 2009).

In several of the qualitative studies, the aim was to identify specific aspects of functioning affected by OABS symptoms for use in development of quality of life questionnaires (Brown et al., 1998; DuBeau et al, 1998). Both Brown et al. (1998) and DuBeau et al. (1998) utilized content analysis and frequency counts to identify topics or issues in relation to OABS that were significant to participants. Brown et al. (1998) reported a high frequency of the following words/phrases (relative to all content): “bathroom access” (24%), “loss of control” (14%), “fear/anxiety” (11%), and “tired (sleep disturbance)” (10%; n=65). In terms of emotional content, also noted were feelings of ‘shame/embarrassment, anger/resentment, alone/isolated and low self-esteem. Similarly, DuBeau et al. (1998) reported that participants acknowledged many psychological issues, including fear of embarrassment, self-concept, loss of dignity, self-esteem, fear of dependency, shame, and vigilance (n=25,

females and males). In terms of frequency, however, the topics of vigilance, burden, cleanliness, financial impact, negative impact on intimate relationships and lack of legitimization of the problem ranked most prevalent.

Taken together, the qualitative inquiries suggest some convergence regarding the need to maintain secrecy about UI and the use of self-management strategies as a key method of coping (Ashworth & Hagan, 1993; Diokno, Sand, Macdiarmid, Shah, & Armstrong, 2006; Hale et al., 2009; Mitteness & Barker, 1995; Peake & Manderson, 2003). Moreover, a recurrent finding amongst the qualitative studies was the participants' reports of fear/anxiety, shame, embarrassment and humiliation related to UI. The findings of Peake and Manderson's (2003) culturally-informed feminist analysis and Mitteness and Barker's (1995) anthropological analysis may shed additional understanding in this regard. The findings suggest that the women's experiences of embarrassment and humiliation associated with UI were related to an "inability to control one's self", as well as fear that others may perceive them as incompetent.

As reviewed above, several qualitative investigations in patients with incontinence have been carried out, however, only very recently has the impact of urinary urgency been examined using this approach. Nicolson et al. (2008) employed a thematic analysis of text from semi-structured interviews with individuals and groups of males and females who reported OABS symptoms. Overall, participants reported feeling anxious about finding ways to cope with their urinary symptoms in

everyday life, feelings of depression and hopelessness, low self-esteem, and “feeling bad about their failing bodies” (p. 353). With respect to urinary urgency, participants reported “thinking and planning about the availability of toilets” (p. 348). Also, participants expressed frustration about their confusion regarding the meaning of urinary urgency for them. Nicolson et al. stated, “this sense of ‘urgency’ played tricks upon them and *did not necessarily signal* that they needed to urinate or indeed that they might experience incontinence....” (p. 348, italics added). The authors continued, citing a quote from a participant in the Women’s Focus group,

“It seemed that simply *not* having the opportunity to go to the toilet makes someone feel the ‘need’ to go, which comes from living with urgency and consequent fear of incontinence...Or, conversely, the opportunity to use a toilet when needed enables people to refrain: ‘I can’t go [i.e., travel] in a coach that has not got a toilet in it, but yet when there is a toilet on the coach, I don’t go.’” (p. 348)

These findings reflect the frustration that OABS patients experience when they attempt to use the appearance of urinary urgency in their awareness as a sign to predict what their body needs (e.g., empty the bladder) or will do next (e.g., leak urine); unfortunately, they are unable to make this prediction with any kind of reliability. Also, participants noted that the need to urinate sometimes appeared in relation to an awareness of the absence of toilets and not in relation to internal sensations. Lastly, the authors observed that urinary urgency was often associated



with the everyday experience of “key-in-the-lock” syndrome – that is, respondents were most likely to experience urinary urgency and UI as they turned the key to the doors of their homes upon arrival or as they entered a washroom. As an example of this, Nicolson et al. (2008) offered the following statement from a male study participant in the male focus group,

“The fear is, a lot of it is, psychological, because I have found, when at home, sometimes I sort of think I must rush to the toilet suddenly, and something happened and taken my mind off it, and it’s gone off. Sometimes when you suddenly think you want to go, one almost doesn’t get there in time, and I am sure this is psychological. Silly things can trigger it off; like when I’m doing the washing up and that, with water running, I had to rush off and so forth. I suppose largely it is the fear, one always goes to the loo just before one goes out just to make certain. So I think a lot of it in my case is psychological.” (p. 348)

Notably, this participant describes his struggle to understand how urinary urgency can suddenly appear in his consciousness as a compelling need that requires immediate action, which after being distracted by other things, disappears entirely from his awareness and does not lead to detrimental urine-related consequences.

In summary, the results of these studies clearly document the wide-ranging psychosocial impairment, including physical and psychological co-morbidity, psychological distress and impaired social, emotional, sexual, and physical functioning, associated with OABS. Moreover, qualitative methodologies, mobilizing

feminist, content and phenomenological analyses of individual and group interviews, have provided a richer, deeper and more meaningful understanding of the emotional and social impact of these symptoms, including urinary urgency, amidst the context of daily life. These studies suggest that urinary continence is intricately linked to self-control and identity as a competent adult (Peake & Manderson, 2003; Mitteness & Barker, 1995). Experiences of UI were associated with an attack on the self (e.g., self-blame, self-disgust) and feelings of vulnerability to attacks from others (e.g., embarrassment, shame and humiliation; Ashworth & Hagan, 1993, Mitteness & Barker, 1995; Nicolson et al., 2008; Peake & Manderson, 2003). The need to maintain secrecy about UI was a key method of coping (Ashworth & Hagan, 1993; Hale et al., 2009; Mitteness & Barker, 1995; Peake & Manderson, 2003), including self-management strategies to avoid leakage (e.g., frequent urination, route planning). Fear and anxiety about avoiding urine leakage and maintaining vigilance were also predominant themes in patients with UI (Hale et al., 2009; Nicolson et al., 2008). There were few qualitative studies that focused specifically on urinary urgency and its impact in everyday life. Recently, participants diagnosed with OABS described their difficulties understanding the desire to void; for example, several participants noted that the presence or absence of a toilet seemed to influence whether a desire to void was present, rather than the bodily-related sensations corresponding to urine volume in the bladder itself (Nicolson et al., 2008). Some patients with OABS described frustration about being unable to predict or know what the appearance of urinary

urgency in their awareness signaled to them, for example, a need to void or impending urine leakage. At this point, we turn to a discussion of the historical approaches to clinical assessment and treatment of bladder storage dysfunction within the discipline of clinical psychology.

### III. The Role of Clinical Psychology in the Assessment and Treatment of Bladder Storage Dysfunction

In the initial phases of the present research project, it was of interest to determine whether, and if so, how, the phenomenon of urinary urgency and/or OABS has been investigated in psychological science, as well as to examine past and present use of clinical (health) psychology to assess and treat bladder storage dysfunction. The prioritization of urinary urgency as the key driver of other OABS symptoms is a contemporary idea, and therefore, neither “OABS” nor “urinary urgency” appeared as searchable terms in research databases prior to 1990. Hence, this literature review examined studies in which the symptoms of OABS (i.e., frequent urination, urinary urgency, UI) were investigated in relation to psychological phenomena, such as emotions, personality, and behavior, to determine how these relationships were conceptualized, to assess whether urinary urgency (or urge) was included in these formulations, and to review any empirical data supporting these relationships. Numerous psychological and psychiatric studies adopting various theoretical

orientations were examined. In the following section, I will first review this scientific literature, and then outline those elements that have relevance to how the problem of urinary urgency was conceived in the present dissertation study.

According to Menninger (1941) and Van der Heide (1941), psychoanalytic formulations regarding bladder storage dysfunction appear in biomedical publications in the late 1930s and 1940s and attributed the appearance of LUT symptoms to the presence of urethral character and urethral eroticism. Urethral eroticism was a concept advanced by Sigmund Freud, who asserted that “enuresis was the psychosexual root of conflicts around ambition” (Bass, 1994, p. 491). More generally, psychoanalytically-oriented psychiatrists interpreted the presence of LUT symptoms in patients as indirect expressions of sexuality, hostility and aggression (Auerbach & Smith, 1952). In situations where medical investigations failed to reveal biological abnormalities that would ordinarily account for the development of LUT symptoms, psychoanalytic formulations of bladder storage dysfunction were offered as an alternative explanation (Auerbach & Smith, 1952). Given the use of case studies to describe psychoanalytic formulations and treatment, it is difficult to determine the extent to which this model was applied therapeutically in medical settings.

Decades later, Renik (1981) investigated the urge to urinate in relation to a series of downpours in the California area in 1977, and reported on the increased presence of anxieties about losing control over the impulse to urinate in several cases.

Referring to Freudian psychoanalytic theory, Renik (1981) noted that the urge to urinate was classified as a non-sexual instinctual impulse, similar to hunger and thirst, which cannot be repressed through ordinary mechanisms of avoiding or transforming perceptions to circumvent conscious awareness. Renik (1981) also stated,

“The urethro-vesicular sensations that trigger urination can be neither avoided nor transformed, but will merely become more insistent in their claim for attention... Undoubtedly, many mechanisms participate in the management of the urinary urge... at the core is the need to keep attention from those urethro-vesicular sensations which compel urination... [I]nsofar that there is a wish to urinate immediately in response to certain internal sensations ... this urge is *surmounted*, and further that it is surmounted not once and for all in childhood, but daily, throughout life.” (p. 109; italics in original)

Renik (1981) speculated that the sensory-perceptual stimulation associated with California rains – the sound, sight, and dampness – bypassed the customary ego control mechanisms to elicit the transient symptoms in his patients. He argued that this mechanism was also similar to the evocation of urinary urge by perceptual stimuli in the daily environment (e.g., running water). Since then, contemporary psychoanalytic formulations have shifted in emphasis to include developmental and lifespan perspectives related to UI and other leaks from the female body, including the experience of shame and humiliation associated with UI, which poses challenges to one’s sense of personal autonomy, self-confidence, and dignity (Klyman, 2004).

Following the psychoanalytic era, a psychosomatic approach was employed in medical settings to explain bladder storage dysfunction in patients who failed to demonstrate biological abnormalities that account for LUT symptoms (Auerbach & Smith, 1952). Personality traits, emotional states, and situational stressors were viewed as triggers of bladder storage dysfunction via a hypothesized direct mind-body connection (Auerbach & Smith, 1952; Dunlop, 1979; Frewen, 1972, 1980, 1984; Rowan, 1975). During this period, a causal relationship between mental states and bladder storage dysfunction was formalized in the second edition of the *Diagnostic and Statistical Manual* under the category of Psychophysiologic Genitourinary Disorders (American Psychiatric Association, 1968; Rowan, 1975). According to this view, psychological phenomena triggered the overactivity in the autonomic nervous system and elicited LUT symptoms (Morrison et al., 1986; Rowan, 1975). Numerous empirical investigations were undertaken to evaluate this hypothesis (Freeman, 1987; Freeman, et al., 1985; Macaulay Stern, Holmes, & Stanton, 1987; Macaulay, Stern, & Stanton., 1991; Millard & Oldenburg, 1983; Morrison et al., 1986; Norton, Bhat, & Stanton, 1990; Straub, Ripley & Wolf, 1949a, 1949b). One of the most notable findings was a temporal association between elevations in bladder pressure, involuntary detrusor contractions (IDCs) and urinary urgency as patients recounted narratives of difficult life situations (e.g., medical concerns, marital conflicts) in case studies. Diversion of the conversations to neutral topics, reassurance or administration of a sedative was associated with the bladder pressures and IDCs

returning to baseline, as well as a resolution of urinary urgency (Straub et al., 1949*a*, 1949*b*). Although the authors opined that the experimental data provided support for the hypothesis that emotional states were associated with bladder disturbances, fewer than half of the study participants (i.e., 7 out of 18) demonstrated this response, and findings inconsistent with the study hypothesis were not addressed in the final formulation. Other patients in the sample, who received a similar diagnosis at study entry, did not demonstrate IDCs or urinary urgency while recounting difficult life situations, and were described as “relaxed” and as having “derived satisfaction from a free expression of their feelings” (Straub et al., 1949*b*, p. 1141).

Decades later, the link between emotional states and the presence of LUT symptoms was investigated in several studies adopting quantitative methodology and psychometrically-validated questionnaires in patients with bladder storage dysfunction. Overall, these studies established that patients with LUT symptoms reported significantly greater levels of anxiety compared to the normal population (Freeman et al. 1985; Macaulay et al., 1991; Millard & Oldenburg, 1983; Perry et al., 2006). However, at the time, causal relationships between mental states and bladder storage dysfunction were no longer emphasized (Freeman, 1987), and the use of multi-axial diagnosis was introduced in DSM-III, where psychological factors affecting physical conditions were coded on Axis I with corresponding medical diagnoses coded on Axis III (American Psychiatric Association, 1980). Therefore, in the 1980s, the empirical evidence supporting increased levels of anxiety in patients

with LUT symptoms was interpreted as evidence of psychological distress related to a medical problem, rather than a cause-effect relationship between emotional states and LUT symptoms (i.e., the psychosomatic hypothesis).

In the 1960's and 1970's, behavioral approaches were employed in the treatment of adults with frequent urination and urinary urgency. These therapies were based upon the observation that most individuals typically react to large bladder volumes by increasing volumetric bladder capacity as well as voiding more frequently (e.g., voiding 500 ml rather than 300 ml); whereas other individuals only increase void frequency (e.g., voiding 300 ml more often; Rovetto, 1983). As such, the patterns of frequent voiding and pre-emptive voiding were considered abnormal habits and targeted for behavioral interventions.

According to Rovetto (1983), behavioral interventions for bladder storage dysfunction in adults were largely developed from Pavlovian and instrumental conditioning procedures used to treat childhood enuresis (e.g., Mowrer & Mowrer, 1938)<sup>4</sup>. These methods encouraged individuals to retain an increasingly greater volume of urine and lowered the patients' responsiveness to cues, including progressive urinary retention (i.e., water loading and delayed toileting after urge) and

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<sup>4</sup> Readers may be interested, or recall from their own experiences, that initial classical conditioning treatment used a bell and pad placed in the child's bed at night. When urine soaked the pad, an electric circuit was completed and facilitated the ringing of the bell. This practice was largely discontinued after empirical data revealed that enuretics urinated frequently in the day and had very low bladder capacities. Thereafter, methods of treatment for nocturnal incontinence focused upon enlarging bladder capacity in daytime hours (i.e., retention training), which was reported to alleviate the problem after 7 to 14 consecutive days.



scheduling urination with progressively longer intervals (Poole & Yates, 1975). An essential element of these behavioral methods was an increase in the time between the urge to void and actual urination. Other components of the therapy included one or more of the following anxiety management strategies: bladder diaries (e.g., self-monitoring), systematic desensitization (e.g., using fear hierarchies), *in vivo* desensitization (e.g., wearing clothes in public places with water sprayed in the crotch area), and cognitive restructuring (Espie, 1985; Figueroa & Jacob, 1981; Lowe, 1988; Poole & Yates, 1975; Rovetto, 1983).

Behaviorists demarcated two general patterns in clinical presentations related to urinary urgency and urinary frequency based upon their clinical observations. In some cases, urinary symptoms were present in situations where the individual is anxious but not in those where the individual is relaxed; in other cases, the bladder capacity was functionally reduced at all times and the patient was fearful of having a leakage accident (Rovetto, 1983). In addition, high levels of somatic preoccupation, catastrophic thinking about potential consequences of the feared (leakage) accident (Rovetto, 1983), social fears of wetting themselves in public (Rovetto, 1983; Espie, 1985), and phobic avoidance responses to situations in which toileting facilities were not readily available were observed (Espie, 1985; Figueroa & Jacob, 1981). Amongst the published articles describing behaviorally-oriented therapies, there was agreement that tailoring the clinical interventions based upon the patients' presentation would be beneficial (e.g., desensitization for anxiety), however there was little consensus about

the sequence of interventions (Espie, 1985; Lowe, 1988; Rovetto, 1983). Moreover, empirical support for the efficacy of these behavioral therapies was drawn from a series of case studies in adults (Lowe, 1988; Poole & Yates, 1975; Rovetto, 1983), which limited the conclusions that could be drawn regarding the effectiveness of isolated components of the therapy.

In 1966, behavioral approaches to treat bladder storage dysfunction were introduced into medical clinics and gained widespread application in the 1970s with ambulatory and institutionalized patients (Burgio, 2004; Frewen, 1972; Jeffcoate & Francis, 1966; Palmer, 2004). At present, behaviorally-based services continue to be offered to medical outpatients by registered nurses with specialized training and education in urinary continence (Fantl et al., 1996; Burgio, 2004). While there is conceptual overlap between the behavioral therapy offered in medical clinics and interventions reported in psychological case studies, the use of desensitization protocols and cognitive restructuring are service components typically delivered by psychologists (Fantl et al., 1996; Lowe, 1988; Payne, 2000; Poole & Yates, 1975; Rovetto, 1983).

Aside from behavioral interventions, there were relatively few investigations that employed psychotherapy as a primary treatment approach in the documented research literature. Psychotherapeutic approaches included supportive counseling and anxiety reduction (Macaulay et al., 1987), hypnosis (Freeman, 1987), autogenic training (Hafner, Stanton, & Guy, 1977) and more recently, cognitive-behavioral

therapy (Garley & Unwin, 2006). Empirical support for the efficacy of psychotherapy in mitigating bladder storage dysfunction was assessed via the impact of intervention upon psychological variables (e.g. levels of anxiety; Hafner et al., 1977), frequency of LUT symptoms (Freeman, 1987), or both (Garley & Unwin, 2006). Although improvements in these variables were reported, the absence of control groups (e.g., a wait list or untreated controls) and the limited number of studies constrain the inferences that may be drawn about the efficacy of these interventions in the broader population of OABS patients.

Clinical health psychologists have advocated for their involvement in UI research and treatment, particularly to support patients' psychological and physical health via coping and management of ongoing interruptions and anxiety/self-doubt associated with this chronic, debilitating condition (Tovian et al., 1994). Recently, Perry et al. (2006) developed a provisional fear-avoidance model of UI that prioritizes the catastrophic (e.g., threat-based) misinterpretations about UI, associated anxiety (e.g. fear of wetting self) and selective attention to bladder-based sensations, which perpetuate the use of safety behaviors (e.g., frequent voiding) and the experience of socio-emotional consequences (e.g., depression, shame, social stigma). By and large, however, very few articles in health psychology have been published in the last decade, rendering it difficult to discern whether psychologists have taken up applied practice in this area and to what extent these efforts are informed by the current

biomedical conceptualizations of OABS (e.g., urinary urgency as the driving force of OABS symptoms).

Turning to the question of whether prior clinical psychological approaches to bladder storage dysfunction included conceptions of urinary urge and/or urgency, this literature review spanning 70 years of documented research revealed a variable treatment of these concepts. According to Renik (1981), Freudian analytic theory prioritized a role for childhood enuresis in psychosexual development, and classified the urge to urinate as a non-sexual instinctual impulse, akin to hunger and thirst, within a larger theoretical framework describing the functions of the ego.

Psychosomatic formulations, most often advanced by urologists in medically-oriented publications, emphasized urinary urgency as a biological phenomenon elicited by ANS overactivity accompanying intense stressors (Freeman, 1987; Freeman et al., 1985; Macaulay et al., 1987; Macaulay et al., 1991; Millard & Oldenburg, 1983; Morrison et al., 1986; Norton et al., 1990; Rowan, 1975; Straub et al., 1949a; 1949b).

Behavioral formulations in the assessment and treatment of bladder storage dysfunction often included reference to both urinary urge and urinary urgency; for example, urinary urge was an important concept in progressive retention training and therapists requested patients identify their urges to urinate in order to delay voiding as long as possible (Espie, 1985; Lowe, 1988). However, there was little consensus with respect to how these concepts were defined; in some case studies, the terms urge and urgency were used interchangeably (Espie, 1985; Lowe, 1988), whereas in other

studies, urgency was described as a strong urge or a more frequent urge (Figuroa & Jacob, 1981; Rovetto, 1983; Yates & Poole, 1972). Understandably, the discrimination between urinary urge and urgency has become more important in today's biomedical context where urinary urgency is viewed as the principal diagnostic criterion of OABS and there is controversy regarding how to differentiate urgency from the normal urge to void (Blaiivas et al., 2007; Chapple et al., 2005; Starkman & Dmochowski, 2008).

In summary, the findings of this literature review uncovered a lack of clarity surrounding the definition and use of the terms urinary urge and urgency in the psychological literature. In light of the desire to develop continence health initiatives that promote earlier detection and treatment of urinary urgency, and the lack of clarity regarding the meaning of urinary urgency amongst health care practitioners and patients, the present study utilized an in-depth phenomenological analysis of patients' descriptions of urinary urgency in their everyday lives to build a more general, inter-subjective description of this phenomenon.

#### IV. More than Biology: The Role of Experience in the Development of Volitional Urination and the Need to Urinate

As noted in the review of literature, biological structures play a key role in facilitating urine storage and excretion (e.g., nerves, muscles, receptors), including the

initiation and termination of urine flow from the bladder at any degree of fullness (Abrams et al., 2003; Chai & Steers, 1996; DeGroat, 2006; Griffiths, 2004). Until now, however, the role of biological structures in urinary continence has been emphasized while its experiential aspects have remained largely unexplored. In particular, the regulation of urination (i.e., development of urinary continence) is intricately connected to the period of experiential learning undertaken by children between two and four years of age, leading to their understanding of how to initiate/terminate urine flow through the relaxation/contraction of pelvic floor structures. Furthermore, individuals typically experience a feeling or sense of when the bladder needs to be emptied – called the need or urge to urinate – in everyday life. In this section, an overview of the social, cultural and psychological dimensions of learning to urinate is presented. Then, a few introductory comments regarding the need to urinate are offered, which will serve as a pertinent, but limited, background to the present phenomenological-psychological investigation of the lived experience of the urgent need to urinate (i.e., urinary urgency) in incontinent women diagnosed with OABS.

One of the collective experiences of humans around the world is the process of learning how to regulate urination. Bladder function begins around the middle of the human gestation period, and is triggered automatically when volumes surpass a threshold level. After birth, an infant's autonomous urination is captured and contained by caregivers through the adoption of socio-cultural and hygienic practices

(e.g., diapers in North America; Lekovic, 2006). In the first few years of life, primary caregivers undertake a socially and culturally influenced instruction period for the purposes of shifting autonomous urination to controlled urination. Caregivers provide structure and direction to children regarding social norms related to urination inside and outside the home, including ‘when’ and ‘where’ urination is appropriate. Through their direct experience of the body, the child begins to build connections between their voluntary relaxation of the pelvic floor and the initiation of urine flow, as well as voluntary contractions of the pelvic floor and the termination of urine flow. As children begin to take initiative in regulating urine flow from the bladder, they become increasingly able to use the toilet independently. Urinary continence is established when urination occurs voluntarily in toilets or other designated receptacles, without the occurrence of urine leakage (i.e., accidents; Lekovic, 2006). Once continence is established, failure to empty the bladder can trigger involuntary bladder contractions and urine leakage, even in healthy continent adults<sup>5</sup> (i.e., overflow incontinence; Griffiths et al., 1996; Wyndaele & DeWachter, 2008).

Given that urination takes place in highly diverse cultural contexts, it is expected that children’s experiences of learning how to regulate urination, as well as the guidance provided by caregivers, will differ across cultures. For example,

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<sup>5</sup> Overflow incontinence also occurs during periods where consciousness is lost, for example, after traumatic brain injury, in otherwise continent adults. Catheters are typically employed to collect and contain the urine in intensive care units (Williams, Yeomans, Curran, & Blackwood, 1993). A fundamental prerequisite for urinary regulation is the state of being conscious.

countries may differ in terms of the availability of public sanitation (e.g., indoor toilets vs. outdoor pits in villages), as well as the cost, use and availability of diapers. In industrialized nations, particularly Canada and the United States, the use of diapers is common, and the instructional period (e.g., toilet training) involves a transfer from diaper use to potty use, and later, a toilet. Less industrialized nations may not have available toilets (e.g., in villages), commercially-available diapers, or may use practices that do not involve diapering the baby, and as such, these practices would not be meaningfully subsumed under the common North American term “toilet training”. For example, elimination communication is a diaperless practice derived from Indian and African traditions that is currently employed in North America. This practice encourages the mother to identify the infant’s natural timing of elimination using signals, cues, or her own intuition to predict the infant’s need to eliminate (Bauer, 2001).

Once the task of learning how to regulate the flow of urine has been accomplished, a second vital task involves having a sense of knowing when and where to seek out appropriate places to urinate. Typically, the feeling or sense of when the bladder needs to be emptied is called the need to urinate, urinary urge or a desire to void. The need to urinate may include a sense of fullness within three-dimensional internal bodily space (Denny-Brown & Robertson, 1933; Finlay, 2006; Nathan, 1956; Wyndaele & DeWachter, 2008). From a biomedical perspective, clinician-scientists have referred to this feeling of what is happening in the bladder as



a proprioceptive awareness made possible by electro-chemical impulses carried along sensory afferent nerves from the LUT to the brain as the bladder muscles stretch and bladder pressure increases (Wyndaele & DeWachter, 2008). Experimental studies have been conducted in healthy volunteers to examine the pattern of sensations in the bladder as it is slowly filled with saline via catheter (Wyndaele, 1998; Wyndaele & DeWachter, 2002). Investigators reported that a spontaneous pattern to individuals' verbal descriptions of three sensations was present, including: (i.) a vague sensation that waxed and waned, not normally noticed in everyday life, and could be ignored for 30 seconds to 2 minutes; (ii.) a familiar, constant sensation that normally persuaded a person to seek a place to void but could be delayed, and could be ignored for 20 seconds (at most) with difficulty and gradually increased in intensity with time; and (iii.) a constant, persistent, and uncomfortable sensation in the perineal region that was described as a strong urge or great tension, and was not accompanied by fear of leakage. Note that these descriptions, which were obtained in biomedical settings, refer to sensorial characteristics, and patients provided their opinions about whether they would use the toilet if these sensations were experienced in daily life (as requested by study investigators). Healthy volunteers described a strong urge or tension at the upper volumetric limit of the bladder.

Although biological structures play an integral role in the manifestation of the need to urinate, there are experiential aspects of this sense of knowing in healthy and disordered/diseased states that remain unexplored. For example, a child who urinates

in toilets according to their own internal cues (and initiative) must tune into their urinary needs and independently act on them. This process of tuning in to the lived experience of the body is an “inverted perception, the perception of the deep tissues of the body, or enclosed or encircled corporeal space...” (Morley, 2001, p. 73).

Although Morley (2001) observed that individuals typically direct their perception toward the body during illness, the bodily-directed perception related to urination takes place in both health and illness. Second, since children need the help of their caregivers to identify locations to urinate in unfamiliar environments, they learn to communicate (i.e., describe) their urinary needs to others. Communication about the topic continues in adulthood but generally the motivation is not to seek help from others but to excuse oneself from interpersonal situations to take care of bodily needs in private places and socially appropriate ways. When bladder storage disorders are present, however, individuals may communicate about the need to urinate when its immediacy is problematic or disruptive (i.e., urinary urgency), or when the social expectation of continence cannot be met (i.e., UI). Given the everyday situatedness of the need to urinate and its amenability to description by those who turn inward to perceive it, the descriptive method of phenomenological psychology (Giorgi, 2009) was considered well-suited for generating knowledge about the experiential aspects of urinary urgency in incontinent women diagnosed with OABS.

## V. Chapter Summary

For up to 18% of community-dwelling individuals who experience OABS, urinary urgency is a sudden and compelling desire to void that may be accompanied by UI, frequent urination and/or nocturia. Review of the literature revealed that the condition has significant and detrimental impact on the physical, social, emotional and sexual domains of function. Moreover, OABS sufferers report difficulties with understanding, predicting and coping with the intermittent appearance of urinary urgency and UI in their everyday lives. The unpredictability of UI is associated with unremitting worry and vigilance about urinary functions, as well as a need to avert or disguise leakage. UI serves as an omnipresent threat to an individual's sense of competence, selfhood and dignity (Mittiness & Barker, 1995; Peake & Manderson, 2003), and patients report intense vulnerability and powerlessness to effect situational change and a tendency to blame themselves for the condition (Ashworth & Hagan, 1993; Hägglund & Ahlström, 2007; Nicolson et al., 2008).

Relatively few qualitative investigations have sought to understand the experience of urinary urgency in patients diagnosed with OABS, which may be related to the recent establishment of OABS in medical nosology. One study described the confusion encountered by OABS sufferers, who have difficulty understanding whether an episode of urgency is a signal to void or an imminent

warning of impending UI, and how it can appear so quickly and compellingly in their awareness, only to disappear when distracted by other events (Nicolson et al., 2008).

With respect to the role of clinical psychology in bladder storage disorders, conceptions have varied considerably over the past seventy years. For example, psychoanalytically-oriented psychiatrists interpreted the presence of LUT symptoms as indirect expressions of sexuality, hostility and aggression (Auerbach & Smith, 1952), whereas psychosomatic approaches emphasized a causal relationship between mental phenomena and LUT symptoms (Auerbach & Smith, 1952; Frewen, 1972, 1980; Rowan, 1975). In contrast, behavioral perspectives asserted that increased frequency of urination is an abnormal habit that shortens the time interval between urge/urgency and urination (Rovetto, 1983), and continues to inform contemporary behavioral modification treatments provided in medical clinics by nurse continence advisors. Around the 1980s, psychological perspectives on bladder storage disorders were revised and mood disorders viewed as mediating factors in their course and trajectory (Freeman, 1987).

Although the development of health psychological approaches had been advocated over two decades ago (Tovian et al., 1994), the sparse availability of published scientific literature rendered it difficult to ascertain the extent of contemporary health psychology practice in this field. Perry et al. (2006)'s comprehensive health psychology model for UI asserted that the use of safety behaviors and socio-emotional consequences follow from a fear-avoidance cycle

originating with a hypervigilance to, and catastrophic interpretation of, bladder sensations. However, biomedical investigations of sensory thresholds have failed to demonstrate that OABS patients detect bladder sensations at smaller urine volumes compared to healthy volunteers (Blaivas, Panagopoulos, Weiss, & Somaroo, 2009; Brubaker, 2004; Chapple et al., 2005; Wyndaele & DeWachter, 2008; Yamaguchi et al., 2007). Thus, to date, the empirical data do not support Perry et al.'s (2006) health psychological model that OABS patients misinterpret or catastrophize bladder sensations. It is clear that innovative health psychological models are needed to build a framework for understanding urinary urgency/OABS.

In terms of developing a contemporary health psychological understanding of Overactive Bladder Syndrome (i.e., idiopathic urgency UI), the finding that urinary urgency develops in continent females over a 20 to 30 year period prior to UI onset represents a window of opportunity to understand the development of urinary regulation difficulties. To date, difficulties in the measurement of urinary urgency in standardized tests of bladder filling have failed to advance clinician's understanding of its biological basis, and questionnaires regarding the symptom in the everyday lives of patients have failed to adequately capture their experience. Information presented in this chapter highlighted the experiential aspects of urinary regulation, including learning how to initiate and terminate urine flow, as well as the everyday process of the need to urinate (i.e., inverted perception), which play a vital role in urinary continence but have received less attention in biomedical contexts. Indeed, at present,

little is known about the subjective experience of urinary urgency from the perspective of incontinent women diagnosed with OABS.

As such, the aim of this dissertation project is to build an inter-subjective understanding of the everyday experience of urinary urgency in incontinent women diagnosed with OABS using a systematic, descriptive and discovery-oriented qualitative approach and method, empirical phenomenological-psychology (Giorgi, 2009). Empirical phenomenological psychology enables researchers to discern psychologically-relevant meanings contained within subjects' descriptions of their lived experience of urinary urgency, and then to determine patterns or structures so that the phenomenon can be understood in terms of its essential constituents (Giorgi, 1989*c*). We now turn to a presentation of the methodological framework of the EPP approach and its application in this study.

## CHAPTER THREE: A PHENOMENOLOGICAL APPROACH TO HEALTH PSYCHOLOGICAL RESEARCH

The purpose of this chapter is to present the methodological framework employed in this study of urinary urgency in incontinent women diagnosed with OABS. First, a rationale for the selection of the EPP approach and method established by Professor Amedeo Giorgi (e.g., Giorgi, 2009) is outlined. Second, a description of the Husserlian phenomenological approach to psychological research is presented, as well as a summary of its procedures for quality assurance. The chapter concludes with a statement of the major influences contributing to my perspective as a researcher.

### I. Rationale for a Phenomenological-Psychological Approach

One of the inherent challenges in health psychology is its application of the philosophical distinction between mind and body in the context of applied research and its relevance to patients' lived experiences of illness (Yardley, 1999). The mind-body distinction refers to the belief that the body is part of the physical (material) world and subject to the laws of mechanics, whereas the mind is immaterial and isolated from physical reality (Yardley, 1999). This belief can be traced back to its origins in ancient Greek philosophy, but its influence in modern science is attributed

to Descartes' writings in the seventeenth century, who divided reality into two parts: thinking substance (mind or consciousness) and extended substance (bodies; Stewart & Mickunas, 1974, p. 4). The modern dualist way of thinking considers "the body as an objective, physical entity and the mind as a subjective, private realm of ethereal thoughts..."<sup>6</sup> (Yardley, 1999, p. 31). Historically, the differentiation of mind from body made it possible to view the body as an object of the mind, and led to widespread use of scientific research to investigate the body as a material substance (Stewart & Mickunas, 1974). Once Descartes' division between the mind and the object of thought was introduced, the question of how these two entities relate became a significant issue affecting the conduct of contemporary health research and practice.

These dualistic traditions are particularly relevant in the work of health psychologists. In quantitative studies, health psychologists are confronted by the need to differentiate bodily components (i.e., physiological sensations) from mental components (i.e., subjective perception), as well as to determine how to measure and relate these dimensions (Yardley, 1999). While procedures of statistical inference are used to substantiate claims about how mental and bodily variables are related to each other, there is little theory available to account for how these relations unfold in the context of the patients' everyday lives. In some conditions, the complexity of the interconnections between bodily systems gives rise to symptoms that are difficult to

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<sup>6</sup> In this model, introspection is the method of access to an "inner" reality, and extrospection is the method of access to an "external" or "public" reality (Giorgi, 1983a, p. 145).



classify as mental or physical, and not easily treated by medication or surgery (Yardley, 1999). These traditions also complicate the formation of therapeutic relationships between medical patients and psychological practitioners. In my own experience as a psychology intern and student-researcher, I have noticed that some patients perceive the psychological dimensions of illness to be less real than biological factors, and interpret a referral for psychological services to manage pain or UI as an effort to undermine the legitimacy of their illness (i.e., “so the doctors think it’s all in my head...”).

In this dissertation project, the EPP approach (Giorgi, 2009) was chosen because it offered a non-Cartesian framework for understanding the experience of urgency that counteracted the prevailing dualism in the study of urination-related disorders. Whereas medical perspectives view urgency as a subjective perception originating in the physical structures in the LUT (i.e., as a sensation) (Starkman & Dmochowski, 2008), a phenomenological perspective focuses directly on the experience of urgency “as it is given” (i.e., as a phenomenon) and asserts “a reality that results from the openness of human awareness to the world [that] cannot be reduced to either the sphere of the mental or the physical” (Polkinghorne, 1989, p. 41). In this model, urgency is made possible by the sufferer’s inverted perception, or “tuning in”, to the lived experience of the body mediated by consciousness. The concept of consciousness is non-dualistic because it refers to a subject who is the source of intentional acts and always oriented toward the world, and includes a

conception of the body (i.e., the body-subject), which is “the center of abilities, powers and movements towards the world... [and] the center of spatial orientation...” (Giorgi, 2004, p.15). Moreover, the perspective affords the same status to phenomena of which one can be aware (e.g., moods, emotions, values, desires, ideas, meanings) that is afforded to physical (e.g., material) objects (Giorgi, 1994).

This project began several years before a comprehensive book about the EPP approach and method was commercially available<sup>7</sup> (i.e., Giorgi, 2009). Instead, the practices of EPP were described in a handful of empirical research articles (i.e., Giorgi, 1985*a*, 2006*a*, 2008, Giorgi & Giorgi, 2003*a*, 2003*b*), and its foundational concepts and core features were inter-woven in over half of the 140+ articles written by its originator. An additional challenge in understanding the approach followed from the need to review accompanying scholarship that described how Husserl’s philosophic concepts had been mediated for use in scientific phenomenology (e.g., Giorgi, 2000*b*, 2000*c*, 2006*a*), and how they informed the scientific and phenomenological criteria that guide research practices (e.g., Giorgi, 1985*a*, 1985*c*, 1997, 2000*b*, 2000*c*). Thus, a large portion of Giorgi’s scholarship had to be synthesized in the context of cultivating a phenomenological psychological approach towards urgency. In the next section, a summary of the EPP framework compiled from these diverse sources is presented.

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<sup>7</sup> Dr. Giorgi was involved as a methodological supervisor, and his role is described in Chapter Four.

## II. The EPP Approach

In this section, an overview of the history and theoretical foundations of the EPP approach is presented first, followed by a summary of how meanings are understood and accessed. Second, the attitudes and practices of the approach are given, as well as the theoretical basis for synthesis of experiential data.

### *History of the EPP Approach*

Phenomenology was established first as a philosophy by Edmund Husserl (1859-1938) to study phenomena as they are experienced and lived by humans (Giorgi, 1970*b*, 1976, 1983*a*, 2006*c*). Husserl's scholarship had a broad influence upon other European philosophers, including Maurice Merleau-Ponty (1908-1961), Jean-Paul Sartre (1905-1980), and Martin Heidegger (1889-1976), the latter of whom went on to develop the first phenomenological studies of existence (e.g., phenomenological ontology; Churchill & Wertz, 2001). European phenomenology continued to advance through the work of American philosophers such as John Scanlon and J.N. Mohanty in the 1950s (Giorgi, 2000*c*). The fields of psychology and psychiatry were deeply influenced by the collective works of these early phenomenologists, including such prominent scholars as Karl Jaspers, Carl Rogers, Eugene Gendlin, Ronald D. Laing, Gordon Allport, Erich Fromm and Viktor Frankl (Churchill & Wertz, 2001; Giorgi, 2006*a*).

Beginning in the 1950s, several American theoretical psychologists took on the task of applying the insights of phenomenological philosophy to the scientific study of psychological phenomena (Cloonan, 2005; Giorgi, 1970a, 2000c, 2006b). These scholars, including Donald Syngg, Robert MacLeod, Adrian van Kaam, and Amedeo Giorgi, worked concurrently, but independently, to produce several innovative methodologies to understand phenomena in the rehabilitation, nursing and psychological sciences (Churchill & Wertz, 2001; Cloonan, 2005). Additional variations in phenomenological methodologies appeared in later decades (e.g., Colaizzi, Moustakas, Van Manen) (Giorgi, 2006b). These approaches are diverse, and differ in terms of their interpretation of Husserl's philosophy, the use of non-Husserlian philosophies (e.g., Heidegger) as a point of origin, and/or the adoption of pluralistic philosophic foundations (Giorgi, 2006b; Giorgi & Giorgi, 2003b).

EPP methodology was launched with the publication of Giorgi's first book, *Psychology as a Human Science* (1970a), and advanced through a series of phenomenological critiques concerning the implications of studying psychological phenomena using natural scientific approaches that fail to take into account the concepts of consciousness and intentionality (Giorgi, 1970a, 1970b, 1971a, 1971b, 1971c, 1976, 1982, 1983b, 2000a, 2000b, 2004, 2006c). It is grounded in Giorgi's interpretations of, and adherence to, Husserl's (1936/1970) philosophy, and endorses a descriptive tradition that is supported by the work of Mohanty, a contemporary

philosopher and scholar of Husserl's original writings (e.g., Mohanty, 1966, 1972, 2002).

### *Theoretical Foundations*

Empirical phenomenological psychology is grounded in a holistic perspective that regards experience as part of an embodied human subjectivity that possesses consciousness (Giorgi, 2000a). Its aim is to understand the phenomena or presences that persons bring about via consciousness (i.e., realities as experienced) (Giorgi, 1983b), and its analytic procedures rely upon disciplinary assumptions about the nature, structure, correlates and presentational function of consciousness, as well as the various styles and modes of presence of objects to consciousness. Each of these aspects is briefly discussed in the section below.

Consciousness is a constant and constitutive activity<sup>8,9</sup> comprised of acts (*noeses*) in various modes that are directed towards objects (*noemata*), and presents itself in a manner that is radically different from material reality (i.e., physical objects; Polkinghorne, 1989; Giorgi, 1993b, 2000e, 2005a, 2006c). Experience is constituted

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<sup>8</sup> Consciousness is a broad term, and does not only refer to content that is present to awareness; rather, content that is not present in awareness (pre-conscious and unconscious processes) is also included. The phenomenological approach adapted for scientific investigation is limited to the investigation of content that is present in awareness (i.e., the experiential world; Giorgi & Giorgi, 2003a).

<sup>9</sup> According to Giorgi (1976), the Husserlian concept of consciousness was further clarified by Gurwitsch in his 1964 book, *The Field of Consciousness*, as a "medium of access", rather than as a substance.

at the meeting between person and world, and is made possible by *intuition*<sup>10</sup>, which is defined as the presentational function of consciousness. Experience involves the “operation of active processes that constitute the various contents (e.g., memory, imagination, feeling, objects of perception) that become present to awareness...” (i.e., presences) (Polkinghorne, 1989, p. 41) and enables humans to be present to the world, both temporally and spatially. The EPP approach views any content that is present in consciousness as valid data for phenomenological investigation (Stewart & Mickunas, 1974). Some of the presences under study will be in line with reality, whereas others will be “out of line in an inferior (pathologies) or superior way (creative expressions)...” (Giorgi, 1983*b*, p. 218), and not all presences will have realistic referents in the everyday world (e.g., hallucinations; Giorgi, 1994, 1997).

Consciousness has an intentional,<sup>11,12</sup> or relational, structure that can be directed towards an object<sup>13</sup>, and when acts of consciousness are directed toward

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<sup>10</sup> Note that *intuition* has a specific disciplinary meaning in phenomenology that differs from its everyday use, which typically refers to a hunch or instinct (Giorgi, 1994, 1995*a*).

<sup>11</sup> As indicated by Schwartz, Wiggins, Schwartz, & Naudin (2003), use of the terms “intention”, “intentionality” and “intentional” in Husserl’s scholarship have specific disciplinary meanings that differ from the meanings typically connoted in everyday life. In the latter context, these terms typically refer to goal-directedness and purpose. According to Giorgi (1997, 2005*b*), the concept of intentionality originated with Franz Brentano (1838-1917). Husserl, who studied under Brentano, modified and expanded the concept in his own work.

<sup>12</sup> Husserl’s intentionality thesis was expanded by Merleau-Ponty (1963) to establish that behaviour can be understood as a structure that already implies man-world relationships, and is available, at least partially, to another (Giorgi, 1970*b*, 1983*b*). More specifically, behaviour is embodied in that “[it] ... is related to the world by means of the body understood as a not-fully transparent subjectivity...” (Giorgi 1970*b*, p. 79). Thus, from a phenomenological perspective, both experience and behavior are intentional, in that their acts are directed to something other than themselves, and are ways of relating to situations (Giorgi, 1983*a*).

<sup>13</sup> This premise is called Husserl’s “intentionality thesis”.

objects, consciousness is always *consciousness about something*<sup>14</sup> (Giorgi, 1993b, 2005a). The term, “object”, refers to anything real, imaginary or illusory that can be related to acts of consciousness<sup>15</sup> (Giorgi, 1975c, 1983a, 2006c). The person is the source of intentional acts, which means that he or she is “always oriented toward the world and its objects and capable of reflection on itself...” (Giorgi, 2004, p. 15) and whatever one can know or speak about comes through consciousness (Giorgi, 1983a, 1997, 2004). In the context of everyday life, an experience is something that is directly and rapidly lived through in the world; we are not aware of all of the things that appear to our consciousness, and phenomenological methodology helps us to access the relational structures (i.e., act-object relations) that are lived but not known (Giorgi, 1982). The function of EPP research, therefore, is to use deliberate and systematic procedures to “slow down what is normally lived through” for the purposes of discovering more general aspects of the phenomena as lived by subjects in everyday experience (Giorgi, 1983a, p. 154).

The correlates of consciousness are the worlds of lived experience (*Lebenswelt* or *life-world*) (Giorgi, 1976). The *life-world* refers to “what everyone knows naively and is directly experienced by all men...” (Giorgi, 1976, p. 292); that is, what humans

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<sup>14</sup> Another way of stating this axiom is that “to be aware is necessarily to be aware of something...” (Ashworth, 2006, p. 19), and the something we are aware of is something other than consciousness itself (Giorgi, 1976). Essentially, “the intentionality of consciousness is a way of describing the openness of consciousness to objects other than itself...” (Giorgi, 2006e, p. 52).

<sup>15</sup> As noted by Giorgi (1997), the object of the intentional relationship is understood in the broadest sense; that is, “it can be specific (pencil) or general (justice), real (bread) or fictive (Centaur), amorphous (the sky) or defined (triangle)...” (p. 238).

find spontaneously before them in the everyday perceptual world that is not reflected upon (i.e., pre-scientific or pre-theoretical). *Life-worlds* require intentional relations to others in the world in order to be understood (i.e., inter-subjectivity, Giorgi, 1976). The theoretical foundation of the EPP approach is grounded in Husserl's assertion that the *life-world* is a primordial reality from which all other attitudes are derived, including the derived perspective of *nature* as conceived by humans (Giorgi, 1976, 1983b). The realm of *nature* is made possible only through a reduction of the experienced world (*life-world*) that removes objects from their relationship to living beings, rendering them as physical and inert matter capable of non-human relationships (i.e., as things), and putting out of play any role for consciousness or experience (Giorgi, 1976, 1995a).

In terms of presence to consciousness, the EPP approach delineates various types of objects and modes of presence (Giorgi, 1986c, 1997, 2004, 2005b, 2006c). Husserl's philosophy distinguishes between real objects, which refer to any object in space, time and regulated by material (physical) causality (e.g., desk, chair), and unreal objects, which fail to possess at least one of the characteristics of real objects (e.g., ideas, memories, dreams, anticipations, etc.). Real objects are also transcendent objects, in that they are in the world and not part of consciousness (e.g., a tree in a forest), and are distinguished from immanent objects, which are part of the same stream of consciousness as the act that is experiencing it (e.g., perception or memory of the same tree). Furthermore, transcendent objects differ from immanent objects in



terms of their appearances; in the pre-reflective experience of the *life-world*, the former are perceived in an adumbrated way, which means that they are given in only partial perspective, whereas immanent objects are not perceived adumbratedly. The quality of appearance also influences the way that a subject can take perspectives on an object; in the *life-world*, subjects can take multiple perspectives on transcendent objects (i.e., a tree), whereas only one perspective can be taken on immanent objects (i.e., thoughts, memories; Giorgi, 1990, 2004, 2006c).

Together, Husserl's distinction between *nature* and the *life-world*, and the delineation of various objects that present to consciousness, are central to the conception of embodied human subjectivity and the value of different modes of research (Giorgi, 1986c, 1997, 2004, 2005b, 2006c). In EPP, humans are viewed as a real transcendent object that is presented to the consciousness of others in the world (i.e., an object for others), and at the same time, s/he has intentional relationships with real (material) or irreal (non-material) objects (i.e., an irreal immanent identity; Giorgi, 2004). As a transcendent object, humans are subject to cause-effect relationships, which can be examined using natural scientific modes of investigation that account for events in terms of space, time and material causality. At the same time, the directed relations that humans have with the world, others and himself are well-suited to phenomenological modes of investigation, which describe situations in terms of the meaning of an experience for the subject (Giorgi, 1971c, 2000a, 2004). The EPP approach considers naturalistic and phenomenological research as

complementary sources of information to understand humans, which both possess inherent limitations in terms of being able to capture the richness and complexity of its subject matter (Giorgi, 1971a, 1971c).

### *Perspective on Meaning*

All qualitative research approaches involve the study of meaning, but differ in terms of how meanings are understood to be constituted by the participant, and later, by the investigator. In the EPP approach, psychological phenomena are amenable to scientific study because they are acts of consciousness directed toward an object<sup>16</sup> and these directed relations are accessible via participants' descriptions (Giorgi, 1982, 1985a, 1995a, 2006c). This section describes how meanings are understood, their situatedness, as well as how they are accessed by the investigator.

In EPP, the study of meanings begins with phenomena, which refers to those presences, or “whatever is given or presents itself to the consciousness of the person” as they live through or engage in a situation in their daily lives (Giorgi, 1997, p. 237). For example,

“Person A may view a painting and call it ugly, person B may view the same painting and call it beautiful. For person A, the painting will have all of the phenomenal properties of ugliness, and for person B, it will have the

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<sup>16</sup> For example, perception involves perception of an object, emotion is a reaction to a situation or event, and desire is a desire for something (Giorgi, 1976, 1985d, 1993b, 2000a, 2000b). Similarly, expectations, anticipations, imagination, illusions and delusions are all acts of conscious directed toward an object (Giorgi, 1983b).

phenomenal properties of beauty. However, for a phenomenological perspective, no claim is made that the painting is in itself either ugly or beautiful; *only its presence for the experiencer counts, and an accurate description of the presence is the phenomenon*” (Giorgi, 1997, p. 236-237; italics added)

The *life-world* descriptions provided by participants reflect the spontaneous (i.e., pre-reflective) direction of consciousness toward objects or states of affairs in the world, which humans are not aware of as it happens (Davidson, 2002; Giorgi, 1986*b*; Rulf, 2003). Humans do become aware of their intentional relation to the world when it becomes available to consciousness via reflection, and participants are encouraged to reflect upon situations in which the phenomena emerged to reveal any implicit assumptions, perspectives, and horizons of the pre-reflective experience (Davidson, 2002; Giorgi, 1983*a*). At the same time, a phenomenon is composed of a network of relationships between intentional relations – that is, not only the intentional relations that were lived, but also their consequences and relations to other situations, all of which are presumed to be inter-dependent (Giorgi, 1970*b*, 1971*b*, 1974, 1975*b*, 1976, 1981, 1986*c*).

Psychological phenomena are studied in context because they cannot be separated from the situation in which they appear (Giorgi, 1975*b*). The indissoluble unity between the conscious mind and that of which it is conscious assures that meanings are *already present* at the time of a person’s experience, albeit implicitly (e.g. “lived meanings”) (Davidson, 2004). Giorgi (1976) illustrates,

“trying to understand...the anger of an adolescent toward her parent because of a curfew ... or the anger of a husband toward an unfaithful wife, in terms of a separate ‘anger-in-itself’... is to misunderstand the way anger is lived. Anger is always experienced as *anger about something*; thus, it cannot be separated from, but belongs to, the situation in which it is experienced.” (p. 319; italics added)

The use of situationally-based descriptions enables inspection of the way in which the phenomenon of interest appears in varied contexts<sup>17</sup> (Giorgi, 1971c). Meanings are differentiated from the intentional object, because the same object may be considered from many perspectives and take on different situational meanings (Giorgi, 1975b, 2006b).

Psychological phenomena are considered to be “temporal, historical and personal” (Giorgi, 1975b, p. 101). The historical and social aspects of participants become known through examination of future horizons (i.e., intentions, anticipations, expectations) and history (i.e., memories, habits), as well as any relations with significant others that influenced the subject’s behavior in the situation (Giorgi, 1976, 1986b). In addition, the “retentional and protentional” (i.e., temporal) characteristics of a phenomenon are taken into consideration, and it is presumed that a ground or horizon is always present, but may take time to unfold (Giorgi, 1975c, p. 203). In this way, the phenomenological method prioritizes a form of knowledge that has

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<sup>17</sup> These other contexts may be another instance of the phenomenon described by the same subject or other descriptions provided by other subjects.

ecological validity in terms of the experiencer's presence to, and connection with, his world.

Phenomenologists direct their attention toward phenomenal or experienced objects (i.e., noemata) which are embedded with perspectivity at the experiential level. Although participants' descriptions are offered from within the everyday perspective of the *life-world* – that is, the “taken for granted, pre-reflective, spontaneous and uncritical attitude” – only access to noemata reveal how the object was grasped by the subject, or its meaning. Giorgi (2000*e*) describes this process,

“a person describing learning how to drive a car stated that the car seemed ‘huge’ to him and it did not seem to be ‘steady and go straight’, etc. After having learned, the car seemed normal and holding the steering wheel in the usual way was sufficient to produce straightness. But one knows that physical things do not expand and shrink and that holding a car wheel firmly will guide it straightly... a researcher does not have to be a direct experiencer of that situation to understand that for a beginning driver there can be *noematic* meanings that distort the givens of a situation because of anxiety or fearfulness.” (p. 65; italics in original).

In this way, analysis is oriented toward the reduced objects (e.g., the anxiety or fearfulness experienced when learning how to drive a car), and not toward the simple objects (e.g., a car that seems huge) (Giorgi, 1983*a*, 1993*b*, 2000*e*). Noemata are rendered “visible” to the researcher after having cultivated a phenomenological

attitude<sup>18</sup>, in which the subject's description is considered as revelatory of *the way the situation exists for the subject*<sup>19</sup> (i.e., the meaning of the situation for the subject), but not necessarily as *the way the situation is in itself* (Giorgi, 1975a, 2006a, 2006b).

These subject-dependent constitutions have a para-objective quality<sup>20</sup>, which means that they display regularities that cannot be deduced or induced but can be intuited and understood (Giorgi, 1986c, 1993a).

Situational descriptions of phenomena contain many phenomenal meanings<sup>21</sup> (Giorgi, 1994, 1997, 2006a), and the adoption of a psychological perspective or point of view is required in order to thematize this particular aspect of the everyday world (Giorgi, 1976, 1983a, 1985a, 1986c, 1993b, 2006b, 2008). The precise meaning of a psychological perspective is difficult to articulate given the absence of a commonly accepted and clarified perspective that differentiates psychology from other

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<sup>18</sup> The phenomenological attitude is a broad term used to describe the attitude of the researcher, as well as the use of methodological abstentions (i.e., bracketing, epoché), which are described in Chapter Four.

<sup>19</sup> A noema is not "in" consciousness, but rather a profile of the transcendent object that refers to the way in which the transcendent object was grasped or the perspective within which an immanent object is grasped (Giorgi, 1990).

<sup>20</sup> Giorgi (1993a) uses the Muller-Lyer illusion to illustrate an example of this form of regularity: the Muller-Lyer illusion shows two lines of equal length, one possessing arrows facing inward and the other with arrows facing outward. What is para-objective about the illusion is that a number of people "see" (i.e., intuit) the latter line as shorter than the former, even when they know that the lines are of equal length (Giorgi, 1986b, 1993a). When working with lived experiences, phenomenologists are interested in understanding how the phenomenon presents itself in the subject's experience (i.e., that one line appears longer), even though s/he is aware that the given is different from how it presents (i.e., lines are of equal length).

<sup>21</sup> The EPP approach affirms that the everyday world is richer and more complex than the psychological perspective and as such, any number of human science perspectives (e.g., anthropological, sociological, etc.) can be employed to analyze a subject's description of experiential phenomena. The researcher, who makes use of his or her own subjectivity to investigate a phenomenon, must specify the perspective adopted while performing the work. The phenomenological approach can be applied in other disciplines (i.e., nursing, anthropology, sociology, etc.), and the perspective chosen by the researcher has a direct influence on the meanings attributed to the phenomenon under study (Giorgi, 1997).

disciplines, such as sociology and anthropology<sup>22</sup> (Giorgi, 2008). The problem is exacerbated by the number of theory-laden perspectives (i.e., behaviorism, psychoanalysis, etc.) within psychology that gives rise to a diversity of possible “sets” that could be used in an analysis. Giorgi (1986c) illustrates what constitutes as psychological in the EPP approach in this excerpt,

“a person who is sweating profusely will experience a glass of water as desirable and even though the thirst has a biological-physiological basis, *the subject’s constitution of the glass of water as desirable through his experience is what constitutes as psychological.* Similarly, a teenager who wears black jackets and hangs around with a motorcycle gang simply because of peer pressure is still *constituting this experience as psychological insofar as his own conscious acts determine that such activities will be positively motivating for him.* In other words, the sheer fact that from another perspective it is recognized that the activities being performed by an individual have their origin outside the individual, does not change the fact they also *go through the individual*, and therefore involve his participation. It would imply that at this particular moment in ‘space’ and ‘time’, this specific individual is the one who finds the water desirable or the gang appealing. *‘Desirable’ and ‘appealing’ are the ways in which the individual construes the objects or events (which have other dimensions as well) and the constitution of these meanings as revealing the world as subjectively relative is what psychological analysis is seeking.*” (p. 62-63, italics added)

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<sup>22</sup> Giorgi (1976) noted that the subject matter of psychology is described as that of human behavior, but such a view fails to delineate psychology from other human sciences, such as sociology and anthropology. Although a psychological point of view is often implied in everyday practice of clinicians and researchers, its explication to a more clarified point of view has yet to occur and is an area for further study (Giorgi, 1985a).

In phenomenological terms, the psychological meaning of the phenomena refers to the noema constituted by subject-dependent acts (i.e., desirable and appealing) precisely as they are given to the experiencer (Giorgi, 1986c).

### *“Seeing” and Working Phenomenologically*

The EPP approach requires the researcher to employ various attitudes and practices in order to render the act-object relations within the subjects’ *life-world* descriptions (i.e., the phenomenal field) visible for analysis, to become part of this inter-subjective situation, and to cultivate openness to what appears or emerges in the phenomenal field, and to remain within her/his circumscribed role (Giorgi, 1983a, 1983b, 1986c, 1989a, 1989c, 2005b, 2006c). Each of these aspects is briefly discussed in the section below.

The researcher cultivates a phenomenological attitude through the use of two strategies: bracketing and the epoché (or the reduction)<sup>23</sup> in order to render the phenomenal field visible for examination (Giorgi, 1983a, 1983b, 1986c, 1989a, 1989c, 2005b, 2006c). The phenomenological reduction involves a temporary abstention from *life-world* claims positing the subject’s experience *as existent* (i.e., as facts) and adoption of the view of the subject’s experience as a *phenomenon*, such that whatever is given in the subject’s experience is regarded as a “correlate of awareness,

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<sup>23</sup> The actual employment of these strategies in this project is described further in Chapter Four.



an act of consciousness...” (Giorgi, 1976, p. 309)<sup>24</sup>. The second strategy, bracketing, involves setting aside one’s assumptions or past knowledge about the phenomenon of interest (Giorgi, 1993b). In addition to facilitating access to *noemata*, the phenomenological attitude assists the researcher in assuming a scientific role by rendering their own prejudices, hopes and knowledge as non-influential as possible, so as to enhance inter-subjectivity of study findings (Giorgi, 1994).

Second, phenomenologists presume that the participants they encounter in research possess *already given* relations to the *life-world* and exist as a part of an inter-subjective situation (Giorgi, 1970b, 2004). The term inter-subjectivity refers to the “union or contact of subjectivities... [where] each member [in a group] participates or merges into it...” (Gordon, 1991, p. 43). An EPP researcher becomes part of this inter-subjective situation by making available her full presence (i.e., her own subjectivity) to vicariously experience the participant’s description of the phenomenon in the *life-world*.<sup>25</sup> The openness and availability of the researcher’s consciousness is made possible by the same intentional characteristics that are ascribed to the participants (Giorgi, 1970b, 1971b). This form of engagement is made possible by ‘vicarious experiencing’, a term coined by Herbert Spiegelberg in the

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<sup>24</sup> According to Giorgi (2000b), Husserl’s phenomenological philosophy included several types of reductions, only one of which was suitable for scientific application: the psychological phenomenological reduction. This reduction brackets the actual, existing transcendental world so that the phenomenal world of the subject can stand out (Giorgi, 2006d).

<sup>25</sup> Note the divergence from the Cartesian presumption in the natural scientific approach that the researcher is separate from her work and the participant is separate from his world (Giorgi, 1970b, 1971b).

1960's, which refers to the use of two strategies, cooperative exploration and imaginative self-transposal (Giorgi, 2000*b*). Cooperative exploration refers to the activities in the interview where the participant shares her experiences of the phenomenon of interest and the researcher facilitates and encourages elaboration of *life-world* examples. The second activity relies on the imaginative faculties of the researcher so that the participant's situation is seen as an "actual variation of the researcher's situation in the world..." (Giorgi, 2000*b*, p. 5) and into which she transposes herself to gain understanding of the other. Spiegelberg (1995) described imaginative self-transposal as

"a peculiar style of occupying the place of the other by our transformed self, not a complete fusion for good, but one which allows us to shuttle back and forth between our own understanding self and that of the other who is to be understood... At this point begins the actual work of constructing the other and his world on the basis of the clues which we find in the situation into which we have put ourselves imaginatively..." (p. 49-50; as cited by Giorgi, 2000*b*, p. 4)

Together, these strategies enable the inter-subjective connection necessary for the researcher's intuition of meanings regarding the phenomenon of interest (Giorgi, 1971*b*, 1994), and make it possible for researchers to apprehend the meaning of experiences that they have not necessarily encountered in their own *life-worlds* (Giorgi, 2000*b*, 2000*e*).

Third, the investigator employs various procedures to ensure an attitude of openness or presence to the phenomenon is cultivated so that apprehension of *what is*

*significant for the experiencing participant* who went through the situation (i.e., “fidelity to the phenomenon”) (Giorgi, 1970*b*, 1971*b*, 1975*b*). In contrast to natural scientific methods in psychology, which rely upon the experimenter to structure the research situation, formulate a hypothesis and operationalize a concept prior to experimentation, the EPP approach prioritizes the subject’s perspective on the situation in which the phenomenon appeared. The researcher is required to abstain from making statements of what is known theoretically about the phenomenon that may constrain their point of view (Giorgi, 1975*b*, 1976, 2008). For example, during the interview, the subject is asked to select a situation that reveals the lived context of the phenomenon and to concentrate on the concrete experience as it was given to him or her in the situation, without pre-judging it or viewing it through any specific perspective (Giorgi, 1971*a*, 1971*b*, 1975*b*, 2008). In the analysis phase, the researcher’s use of methodological abstentions<sup>26</sup> enable him or her to be receptive to what is unfolding in the subject’s description and to maintain distance from his or her processes that may interfere with ascertaining the subject’s lived meanings (Giorgi, 1976, 1989*c*). Moreover, the subject’s description is worked with in its totality prior to the application of any specific mode of organization by the researcher. In this sense, there is a double-context that separates everything the subject has registered as worth mentioning about their experience that was originally presented to the

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<sup>26</sup> These procedures (i.e., bracketing, epoché) are explained later in this chapter and in detail in Chapter Four.

researcher, and the researcher's own perspective and mode of organization applied to the descriptive data (Giorgi, 1975*b*). Together, the attitude of openness and applied research procedures facilitate a context of discovery for the researcher (Giorgi, 1971*b*, 1975*a*, 1986*a*).

Lastly, while a human equality between the researcher and participant is established in the research endeavor, the researcher's participation is circumscribed by his/her scientific or professional role (i.e., a *participant-other* stance). Since the participant and the investigator both possess consciousness, they are able to constitute a psychological reality through "presence to the world, others, and ourselves..." (i.e., to intuit; Giorgi, 2005*b*, p. 76). In the research situation, the participant and the investigator employ intuition to describe the givens of experience, but the former does so during the interview, whereas the latter does so during the analysis of the subjects' description. This stance limits the investigator's activities to the constitution of a "psychologist's reality" made possible through the adoption of a psychological perspective toward the intentional relationships contained within the participant's descriptions, as well as in her use of her own consciousness as a medium to intuit those meanings already lived by the subject (Giorgi, 1986*a*, 1995*a*, 2006*b*, 2006*c*). As such, the investigator's contributions are more restricted than her customary personal identity (Giorgi, 1982, 1985*a*, 1993*b*, 2000*e*).

### *The Synthesis of Experiential Data*

The work in a phenomenological project begins with the collection of specific and idiographic descriptions from participants about how they lived through a phenomenon in everyday life, and then seeks to discern its general features or characteristics (i.e., essences)(Giorgi, 2008). These procedures rely upon disciplinary assumptions about the nature and discernibility of the structures of consciousness. Each of these aspects is briefly discussed in the section below.

Essences are invariant meanings that are able to subsume a number of variations in the experiential data (Giorgi, 1989*c*, 2006*a*). The discovery of the essential features of a phenomenon does not occur through induction, deduction or generalization, but rather through a direct grasp of meaning apprehension (i.e., eidetic seeing). Thus, use of the researcher's own intuition is the means by which meanings and essences come to consciousness (Giorgi, 1983*a*, 1983*b*, 2006*a*, 2006*b*). In studies of psychological phenomena, the term "psychological structure" is used instead of essences, which reflects the idea that a number of psychological features may be discovered to be essential for the phenomenon to present itself, and these features have relations between them that also require elaboration (Giorgi, 1989*c*, 1997, 2005*b*, 2006*a*). The generation of a psychological structure requires the intuition of the meanings already lived by the participants first, and then, the discovery of general features from these intuited meanings with the help of

imaginative variation and the eidetic reduction (Giorgi, 1989*c*, 1997, 1998, 2000*b*, 2005*b*).

The stream of consciousness is in continuous flux in everyday life, and structures represent stable moments within it (Giorgi, 1989*c*). Amidst the variations in its particular manifestations, these structures have stability and constancy, which enable the identification of the object as an identity each time it is encountered experientially (Giorgi, 1989*c*, 2005*b*). The general features of a phenomenon are discernible because of the structuring activities of experience, which enable humans to apprehend an object as a concrete particular occurrence (e.g., a pencil), as well as an instance of a kind or type of something (e.g., a structure or category of meaning, like “pencil-ness”; Polkinghorne, 1989). For example, a pencil is still recognized as a pencil in spite of differences in shapes and sizes that modify its appearance. The process of analysis, therefore, involves a discernment of certain aspects or features of the phenomenon that can be varied without changing its identity (e.g., different sizes of pencils) from other aspects that are invariant and considered essential for its apprehension in experience irrespective of context (e.g., the presence of a lead cylinder; Giorgi, 1983*a*, 2006*a*, 2006*b*). With respect to the interests of the present study, participants’ accounts of urinary urgency were viewed as revelatory of the experiential patterns that they encountered in everyday life, and within these patterns are phenomenal features that facilitate the recognition and identity of urinary urgency (Giorgi, 1989*c*, 2008).

The knowledge claim made in phenomenological research is that the discovered psychological structure is one type of the experienced phenomenon, which does not represent the final word on any given topic (Giorgi, 1983*a*, 1995*b*). Rather, the practice of phenomenology recognizes that there are many eidetic entities or types of experiential phenomena and a single study is designed only to uncover very few of the types that exist within a pre-specified context.

### III. Quality Assurance

Quality is an important characteristic in the work of scientists, and the appraisal of quality typically refers to the rigor by which evidence was obtained and analyzed, as well as the relevance of the findings to contexts other than the one in which it was produced (Giorgi, 2005*b*). In psychological science, research models in the quantitative tradition employ the concepts of reliability, as well as internal and external validity, to evaluate the quality of knowledge produced. Since the aim of quantitative methodologies is to establish claims regarding cause-effect relations between variables, the researcher is accountable for assessing the strength and limits of this claim as well as its applicability to a population broader than the research sample in which it was observed. In contrast, the goal of a human science grounded in phenomenological philosophy is to create descriptions of *life-world* phenomena that facilitate knowledge through discovery and inter-subjective understanding. The

knowledge produced by phenomenologically-based research focuses on the non-naturalistic dimensions of psychological phenomena, and so judgments about quality are best made in relation to its original phenomenological philosophy (i.e., Husserlian) and associated theory of science. As noted earlier in this chapter, the Husserlian concepts of consciousness, experience and intentionality are fundamental to how psychological phenomena are understood and investigated, and as such, the traditional concepts of validity and reliability have been transformed for suitability within this framework (Giorgi, 1988, 1989a, 1995b, 2002, Salner, 1986; Wertz, 2010). This section describes the characteristics used by Husserlian-based phenomenologists to evaluate the quality of their scientific projects.

Ecological validity in the EPP approach is brought about by the priority placed upon the psychological reality experienced by humans in the *life-world* (Giorgi, 1983b). As described earlier in this chapter, the process of research entails contact with intuited meanings in the stream of lived experience, first by the subject and then by the researcher, so that the essential meanings responsible for the apprehension of *life-world* phenomena can be discovered (Giorgi, 1997, 1989c, 2008). The consistency with which this process is carried out relies upon the researcher's commitment to include only those data that have been encountered within the spontaneously intuited stream of lived experience as evidence, as well as to preserve the part-part and part-whole relationships that are given in the *life-world* description (Giorgi, 2006a). With regard to evidence, the EPP approach rejects the use of



constructs or explanations (i.e., themes or theories) as sources of data or products of analysis because these forms do not appear spontaneously within the participant's (or researcher's) stream of lived experience (Giorgi, 1985a, 1989c, 2008). The second matter refers to how the interview data is managed as it is broken down into manageable parts during the analysis. The parts (meaning units) are never extracted from the whole transcript, but remain in position so that the researcher retains contact with holistic meanings as s/he works to explicate partial meanings within a meaning unit (Giorgi, 1997). This procedure differs from other qualitative methods, such as thematic analysis, which extract similar words or phrases that recur in the data, and separate thematic units from the original context (Giorgi, 1989c, 2008). Moreover, EPP requires the researcher to discern and clarify the inter-relationships among the partial meanings that the subject lived through, rather than postulating connections between de-contextualized thematic elements (Giorgi, 1989c). Taken together, the focus on the psychological reality experienced by humans in the *life-world* and the emphasis on the holistic context render the study findings directly applicable to practitioners located in clinical settings where patients receive treatment for OABS (Giorgi, 1975b).

In the EPP approach, the credibility of study findings is partly established by the rigor with which the original descriptions are transformed into phenomenological-psychological expressions. The phenomenological perspective recognizes that the lived meanings communicated by participants are pre-reflective, and therefore, not

necessarily known or made explicit during the interview (Giorgi, 1975*b*). As such, the researcher is required to thematize the psychological aspects of the phenomenon by adopting particular disciplinary attitudes, and this practice raises concerns about the potential for distortions arising from the influence of her or his “personal wishes or desires ... or inattentive presence...” on the descriptive outcomes (Giorgi, 1995*a*; p. 25). Methodological abstentions enhance the rigor in the transformations by reducing the influence of the researcher’s own personal or theoretical views, and these skills are learned through experiential training and supervision by a phenomenologist (Giorgi, 1975*c*, 1995*a*). The potential for omissions of experiential data by trainees is also reduced by supervisory involvement. In the ordinary practice of scientific phenomenology, which is unsupervised, the procedure of having to account for all of the original data in the psychological structure affords protection from the error of omission and the procedure of multiple transformations of original data affords opportunities for self-criticism and detection of overlay. Despite the presence of these strategies, which offer a systematic and sustained criticism by the researcher with regard to her work, all error cannot be eliminated (Giorgi, 1994, 1995*b*, 2000*c*).

The credibility of EPP study findings is also enhanced by the transparency in reporting the original data and transformations, which displays the researcher’s role in the analysis, including her decision-making and approach (Avis, 2005). The researcher’s commitment to collect all data that the participants felt worthy of mentioning (Giorgi, 1975*b*) affords rich and complex accounts of the phenomenon of

interest in terms of how they understand it in the *life-world*. During the analytic procedure, a double-context is used to keep the participants' descriptions separate from the transformed data of the researcher (Giorgi, 1975*b*, 1992*b*). This format provides an explicit demonstration of the researcher's mode of organization on the data (i.e., meaning units) and transformation from the participants' verbatim descriptions into phenomenological-psychological expressions. Moreover, since the work precludes the possibility that other researchers can have direct contact with the intuitive processes of the primary researcher, the double-context is an assurance that readers know which of the original expressions gave rise to a particular intuition of the researcher (Giorgi, 1989*a*). Lastly, the reader is able to ascertain how the aspects of the lived situation selected by the subject were "perceived and understood by the researcher" (Giorgi, 1975*b*, p. 99). From the researcher's perspective, it is not possible to know which intuitions will emerge while working with the data and the double-context balances the need for the researcher to remain as open as possible to whatever meanings arise, while making the process as transparent to the reader as possible (Giorgi, 1989*a*).

The credibility of EPP findings is further enhanced through the awareness of human perceptual tendencies that can interfere with experiential data analysis and procedures to address these problems (Giorgi, 2006*a*). The first perceptual tendency arises when an individual presumes that an object in present perception has features that are similar to already encountered objects (Giorgi, 1975*c*, 1995*a*, 2008). Within

an analysis, similarities may be observed across the varied accounts of experiential descriptions, or between experiences in the transcript and other theoretical writings and/or the researcher's own experiences. As Giorgi (2006a) explains,

“Many experiential errors are committed when current experiences provoke associations with former experiences and then are subsumed under the latter as identical whereas they may be only similar, and the differences could be important.” (p. 355)

Although such presumptions offer advantages in everyday life (e.g., reduced novelty of environmental stimuli, faster speed of processing), their occurrence in a phenomenological analysis can lead the researcher to overlook phenomenal features and/or exert influence on the data in terms of their own personal or theoretical views. The bracketing procedure reduces this perceptual tendency by introducing a sense of distance between the researcher and the data so as to remain receptive to what the participants shared about it (Giorgi, 1976, 1989c, 2008).

The second concern involves the stability of experiential data. Since humans possess a perceptual tendency to automatically presume the existence of things perceived in everyday life, they can hold firm beliefs about the way in which an experience unfolded that are later contradicted by additional available information (Giorgi, 2006a). When the aim of qualitative research is to make factual claims about experience, this perceptual tendency creates instability in knowledge that is problematic. In scientific phenomenology, the epoché acts as an assurance of reliability because the researcher specifically limits her knowledge claims to the

discovered situational and essential meanings about the phenomenon in terms of how they existed *for the experiencer* (i.e., how the phenomenon presented itself), rather than making a factual claim that the situation really unfolded in the way that it was experienced (Giorgi, 2005b, 2006b). The procedure is also the basis for the researcher's claim that the work is limited to phenomena only, which in the strictest sense refers to presences or to how things *appear* to consciousness, rather than realities (Giorgi, 1983b).

A third concern involves the use of activities that interfere with the researcher's level of presence to experiential phenomena described by the participant. At least two errors are recognized: the psychologist's fallacy and "mixed discourse". The psychologist's fallacy refers to the researcher's error of confusing theoretical knowledge about a process with the subject's direct experience of that process (Giorgi, 1981, 1982, 1985a)<sup>27</sup>. Wild (1969; cited by Giorgi, 1981) illustrates the perceptual error using a presentation of two different perspectives on the woods. Whereas a child may experience the woods as 'scary and forbidding', and an adult may experience them as 'a dense grove of pines on a windy hill'; an adult would commit the fallacy if s/he presumed that the child experienced what the adult knows

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<sup>27</sup> Giorgi's (1981) elaboration of the psychologist's fallacy is based in the writings of William James (James, 1890/1950). The fallacy is rooted in a psychologist's confusion of standpoints and can unfold in at least two ways. The first involves a confusion of the psychologist's theoretical knowledge with the subject's experiential knowledge (described above). The second version of the fallacy, which may be more relevant to clinical work, occurs when psychologists make the presumption that an individual has awareness of his/her mental state in the same way that the psychologist does.

about the woods (i.e., pines on a hill). The second error, “mixed discourse”, refers to the practice of applying empirical procedures in phenomenological work<sup>28</sup> (Giorgi, 1989*a*, 1994). For example, activities such as counting meanings, assigning codes/ratings to meanings, and generating/verifying hypotheses when analyzing interview text seek to establish the frequencies of meanings (Giorgi, 1994, 1995*b*). Both errors interfere with the researcher’s level of openness and availability toward what was significant for the participants who lived through the phenomenon, and thus, have a negative influence on the researcher’s intuition of meanings.

Lastly, the emphasis on inter-subjectivity in all phases of the EPP approach is a contributor to the generalizability of its analytic products (Wertz, 2005). Just as the researcher engaged in a meaningful understanding of participants’ phenomenal experiences via cooperative exploration and imaginative self-transposal, they also need to take steps to cultivate an inter-subjective attitude between the scientific audience and the results of the investigation (Gordon, 1991; Stanghellini & Lysaker, 2007). These steps are undertaken when the researcher strives to make links between the research findings (the structure) and other literature, as well as their elaboration of the significance of the findings to a contemporary problem.

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<sup>28</sup> The issue of mixed discourse is one dimension of a larger discussion about theoretical and methodological consistency in qualitative research. Methodologists have argued that researchers need to evaluate the quality of research using criteria relevant to the originating system, rather than applying criteria from unrelated systems of thought (Giorgi, 1986*b*, 1989*a*, 1994, 1995*b*, 2006*a*; Lincoln & Guba, 1985).

#### IV. Researcher Perspective

My interest in the topic of urinary urgency and incontinence emerged from my own experiences working as a Clinical Research Scientist at a pharmaceutical company prior to entering the Ph.D. program at York University. In this role, I worked on several clinical trials designed to test the efficacy and safety of a controlled-release anticholinergic drug to alleviate urgency UI symptoms (Radomski et al., 2004), and had become knowledgeable about the biological basis of the condition. While developing two subsequent clinical trials, the diagnosis of OABS had become established and I was asked to create a pre- and post-treatment measure of urinary urgency (Barkin et al., 2004; Corcos et al., 2005). At that time, I relied on the standard methods of medical assessment to inquire about symptom frequency and magnitude, and analyses of these data revealed an internally consistent questionnaire that correlated significantly with clinical outcomes.

Despite the statistical success of the instrument in terms of its psychometric characteristics, I was disconcerted by the feedback received from study staff. They reported that participants had difficulty discriminating urinary urgency from other bladder-related sensations, and the staff's own lack of clarity about the construct hindered their ability to provide guidance. These concerns were presented in the academic literature a few years later; urologists expressed dissatisfaction about the confusion when communicating to patients about urinary urgency and the controversy

regarding the conceptualization of the symptom (Abrams, 2005; Brading, 2005; Brubaker, 2004; Brubaker, 2005; Chapple et al., 2005; Chapple & Wein, 2005; Starkman & Dmochowski, 2008; Staskin, 2004; Yamaguchi et al., 2007). From my perspective, this topic was intriguing because the biological models of research that I would ordinarily employ to better understand a problem (i.e., animal or *in vitro* experiments) had very little utility in this context. My desire to continue investigating urinary urgency required learning an alternative approach that recognized the contribution of human subjectivity.

When it came time to propose a dissertation project, my first inspiration came from Carl Rogers' person-centered therapy (Rogers, 1957, 1963, 1975) that I was introduced to during the clinical training at York University (e.g., Rennie, 1998). I was impressed by the priority that Rogerian therapy placed upon clients' phenomenological worlds, as well as the contrast between his approach and the approaches employed by researchers using quantitative methodologies (i.e., the objective or neutral frame of reference). Once the difficulties measuring urinary urgency using quantitative methods had become apparent to me, Rogers' approach was a primary motivating force in my initial decision to seek out qualitative methods that would tap into women's own descriptions of urinary urgency. My decision to select empirical phenomenological psychology (Giorgi, 2009) as the qualitative approach and method in this study was important not only because of the priority it placed on investigating phenomenal experiences, but also due to its explicit



recognition that how these experiences were to be understood was different from how physical and biological realities were understood (Giorgi, 1971*b*). My education and experience in the biological sciences had prepared me to employ particular presumptions and practices suitable for use with material (physical) objects that could be “seen” (i.e., that present themselves to my perception), but this approach was not well-suited to investigating the psychological meaning of urinary urgency, which did not possess these qualities. This new way of conducting research required a shift in my attention and focus away from the facts of the experience to the qualities or meaning of experience, and a move away from using measurement (e.g., frequency counts) to employing methodological abstentions (i.e., bracketing, the epoché) so as to access and explicate participants’ psychological realities (presences; Giorgi, 1983*a*, 1983*b*, 1986*c*, 1989*a*).

The second major influence in this project arose from critical health psychology and its critique of the discipline’s inattentiveness to economic, political and/or social factors in health, and its reliance on highly individualized and reactive treatments to contain symptoms and manage crises (e.g., Crossley, 2001; Estacio, 2006; Prilleltensky, 2005; Prilleltensky & Prilleltensky, 2003). The conceptual framework of health and human services proposed by Prilleltensky (2005) argues that the context of health psychology involves two intersecting domains that give rise to four quadrants (or types) of service: (i.) a temporal domain, referring to the timing of interventions (e.g., proactive/reactive), and (ii.) an ecological domain, referring to the

site of interventions (e.g., person-centered/community centered). According to this framework, the success of individualized solutions often requires the implementation of services that intervene at systemic levels<sup>29</sup>. In the case of urinary urgency and incontinence, research has already demonstrated that sufferers experience shame regarding their lack of conformity to the implicit cultural norms of restraint and control, and most commonly adopt self-help methods to manage the problem privately for as long as possible (Klyman, 2004; Hale et al., 2009; Milsom et al., 2001; Mitteness & Barker, 1995; Peake & Manderson, 2003). Thus, despite decades of research, present-day sufferers continue to manage UI as a social and hygienic problem rather than a medical one (Fantl et al., 1996), and this perspective is a likely contributor to low rates of health services utilization. From my perspective, application of Prilleltensky's (2005) framework to the problem of urinary urgency and UI draws attention to the need for proactive and collective interventions that identify women with symptoms at earlier life stages or women at risk of developing symptoms (e.g., changes in health service policy to screen for pelvic health risk factors earlier in the lifespan, such as the post-partum period). Given that this study sought to understand the psychological meanings of urinary urgency in ways that prioritized the

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<sup>29</sup> Prilleltensky (2005) cited an example in which implementation of a health program to manage infant diarrhea using parental education was highly successful at the individual level, but a systemic limitation was the families' continual exposure to contaminated water. Such examples serve as reminders that attention to both individual and systemic factors are necessary for positive health outcomes.

women's experiential worlds (e.g., ecological validity), its findings are expected to possess utility for early intervention models with a focus on health promotion.

## V. Chapter Summary

This chapter presented the methodological framework of the empirical phenomenological-psychological (EPP) approach (Giorgi, 2009), including its foundations in the Husserlian philosophic concepts of consciousness, experience, intentionality, *life-world*, and embodied subjectivity. This chapter advanced the EPP approach as a non-dualistic methodological framework that is well-suited to health psychology, and in particular, the study of urinary urgency. Its methodology is composed of a set of attitudes and presuppositions towards its objects of study that seek to enhance the researcher's presence to human subjectivity, and differ from mainstream natural scientific approaches employed in psychology. Most notably, subjects are considered to be *already related* to world and part of an inter-subjective situation, whose past and present meanings are revealed through relations with significant others, future horizons (i.e., intentions, anticipations, expectations) and personal history (i.e., memories, habits). Moreover, the human equality established between researcher and participant affirms the importance of the researcher's full presence in the research process (i.e., his/her own subjectivity) using procedures oriented to produce inter-subjective findings by rendering the researcher's own views

(i.e., prejudices, theories, hopes, ambitions, etc.) as non-influential as possible (Giorgi, 1994). With respect to the present study, the application of the EPP approach affirms urinary urgency as a lived and embodied experience (i.e., an experiential phenomenon) whose givens are constituted by the activity of consciousness (i.e., act-object relationships) and made accessible to the researcher via participants' descriptive reports. Moreover, urinary urgency is viewed as a part of an embodied human subjectivity composed of complex, inter-dependent relationships with others, the world and ourselves. The aim of the present study is to describe the intentional relationships contained in the subject's description of urinary urgency, which are revelatory of the lived meaning (i.e., the way the situation exists for the subject; Giorgi, 1994). We now turn to a presentation of the EPP method employed in this qualitative study of the lived experience of urinary urgency in incontinent women.

## CHAPTER FOUR: STUDY PROCEDURES

The aim of this study was to clarify the phenomenon of urinary urgency from a psychological perspective by determining its general features based on participants' descriptions of how it was spontaneously lived (Giorgi, 2006*b*). The study procedures involved the collection of concrete descriptions of urinary urgency from the participant's *life-world* (i.e., as it was lived spontaneously) and the determination of essential meanings using the empirical phenomenological psychological approach and method (Giorgi, 2009). The purpose of this chapter is to describe the procedures employed in participant selection and recruitment, data collection and analysis, as well as ethical considerations.

### I. Participant Selection and Recruitment

The research protocol and participant information/consent form were reviewed and approved by the Human Participants Review Committee at York University (Certificate No. STU 2007-64, May 17, 2007, Appendix A) before any study procedures were initiated.

Ambulatory females, between 18 and 80 years of age, with clinically significant urinary urgency who attended a community urological clinic were approached about the study by their consultant urologist or this author (PCM).

Women who met the following criteria were eligible for study entry: (i.) a past or current diagnosis of OABS, or mixed UI with clinically significant urinary urgency, (ii.) ability to speak and read English at a Grade 8 level (or higher), and (iii.) willingness to participate in the study and provide written informed consent. Women were excluded from the study if they had an indwelling catheter at the time of the study, a prior diagnosis of interstitial cystitis or tumors (malignant or non-malignant) of the lower urinary tract, and/or a history of urethral obstruction. These exclusion criteria were applied to ensure that the experiences of urinary urgency described by participants were not unduly influenced by co-morbid physical or biomechanical stimuli (e.g., infection, inflammation, urethral scarring) that are known to give rise to a sense of urinary urgency.

The inclusion of a single gender (i.e., females) followed from knowledge about the differences in the biological basis of UI and its patterns of illness amongst males and females. As mentioned in Chapter Two, UI in males is often secondary to bladder outlet obstruction (e.g., prostatism), which disrupts the voiding phase of bladder function and manifests as interruptions to the urinary stream. In contrast, UI in females is secondary to loose pelvic musculofascial attachments and involuntary bladder contractions and is viewed as a disturbance in the storage phase of bladder function (Andersson, 2007; Herzog et al., 1990). As a result, males and females encounter differences in the onset, natural history, and treatment-responsiveness of UI, and it was anticipated that these differences would be of such significance that

they would interfere with the ability of the researcher to synthesize all of the *life-world* meanings into a single coherent structure. Therefore, I decided to limit this investigation of urinary urgency to the experiential meanings of a single gender, females, with an acknowledgement that a subsequent study examining males' experiences could be performed at a later time.

The study sample included female medical patients who had attended a community urological clinic for assessment of urinary urgency. Potential participants were identified from among patients who were in the process of being assessed by the urologist, as well as using medical records of patients who had already been assessed. In the former case, the urologist or his staff provided a brief verbal description of the study to female patients undergoing medical assessment for bladder storage disorders, as well as a copy of the patient information and consent form (Appendix B). Within one to three weeks of initial contact by the urologist or his staff, the investigator (PCM) telephoned the women who had provided verbal consent to be contacted about the study.

In addition, female medical patients with urinary urgency who had previously attended the urological clinic for assessment of bladder storage disorders were identified using a review of existing medical records. Medical records were reviewed by this author (PCM) to determine patients' eligibility for study entry starting with the year the study was conducted (i.e., 2007), and then each successive previous year (i.e., 2006, then 2005, then 2004, etc.). Medical patients from the most recent referral year

(i.e., 2007) were contacted first to ensure that study participants had the most current urological diagnostic formulation. The recruitment process continued until the researcher had conducted 10 interviews.

All medical patients who were identified as potential participants (e.g., identified from records or who had provided verbal consent to staff) were telephoned by this researcher and a prepared script was followed (Appendix C). Women were informed that the study procedure involved two parts; first, the completion of three questionnaires of about one to two pages in length, and second, a semi-structured interview lasting between 20 minutes to 1.5 hours, depending upon how much information they shared. They were asked several questions to confirm that inclusion/exclusion criteria were met. Each woman who indicated interest in the study was offered a copy of the Patient Information and Consent Form by mail. Women who agreed to participate were scheduled for an interview at the clinic of the urologist. Telephone interviews or interviews in locations other than the clinic (e.g., the home of the research participant) were considered if requested by the research participant. All participants who booked an appointment were informed that they would be asked to provide a brief history of urinary urgency and to describe at least one example of the symptom as it took place in everyday life.

The urological clinic was chosen because it offered accessibility to medical patients who were expected to meet study inclusion/exclusion criteria, as well as the clinical/medical research expertise of the urologist and his staff. I had worked with



this urologist and his associates on two clinical trials while employed as a Clinical Trials Scientist with a pharmaceutical company. The clinic staff had more than ten years of experience with pharmaceutical drug trials and the regulatory guidelines associated with this type of research (e.g., International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceutical for Human Use Good Clinical Practice Guideline, 1997). In addition, the urologist expressed his willingness to offer time to assist with recruitment of medical patients currently under investigation for OABS or urinary urge incontinence, to provide clarification regarding medical issues that could arise during the study, and to provide office space to interview the patients and review clinical charts. The urologist assisted with recruitment by explaining the study to patients who attended his office for OABS-related concerns, and to inquire about their interest in being contacted by the graduate student for further information about participating. Given our prior professional relationship, I trusted that our collaboration would meet the needs of this community-based research health psychology project in terms of both ethical and scientific standards.

The urological clinic was located in a city in South-Western Ontario. According to the 2011 census, the city's population was over 175,000, with 16.9% over the age of 65 years (Statistics Canada, 2012). According to 2006 census data, the city has a more educated population compared to provincial averages, with 57% of the residents having attained a post-secondary education, and 53% of this group

having completed university-level studies (compared to 53% and 48% respectively; Community Development Halton, 2009). In addition, median incomes in 2006 revealed that city inhabitants were more affluent, with 20% higher incomes than provincial averages (Community Development Halton, 2009). The majority of medical patients attending the clinic were expected to reside in or near the city even though the clinic serviced a broader catchment area which, according to the 2011 census, had a population of 501,669 persons, with 13.2% over the age of 65 years (Statistics Canada, 2012). Medical patients residing in the larger catchment area were expected to travel approximately an hour by car to attend the clinic.

## II. Data Collection

Medical patients who agreed to participate in the study were scheduled for a single meeting with the researcher. At the outset of this meeting, the study procedures and Patient Information and Consent Form were reviewed and any questions/concerns were addressed. Women were reminded that the study involved three questionnaires, as well as a semi-structured interview lasting between 20 minutes to 1.5 hours. After the Patient Information and Consent Form (Appendix B) was signed, a copy was provided to the participant. Participants were offered an opportunity to receive a summary of the study results, upon completion of the dissertation. All study

participants were assigned a number, as per order of entry, for identification purposes and to ensure anonymity.

Each participant was asked to complete three questionnaires prior to the interview. These procedures are described below.

*i. Questionnaires*

The study questionnaires are given in Appendix D. Two of the three questionnaires were completed by the participant, including (i.) a demographic questionnaire including age, sex, gender, relationship status, number and ages of children, highest grade completed, sexual orientation, and ethnicity, and (ii.) the Urinary Symptom Questionnaire (Irwin et al., 2006). A third questionnaire ascertained the participants' current medications and co-morbid medical conditions, and was completed by the interviewer in consultation with the participant.

The Urinary Symptom Questionnaire is a structured interview developed by an international panel of urological and epidemiologic experts, and previously employed to assess prevalence rates of urinary incontinence, overactive bladder and other urinary tract symptoms in a population-based, cross-sectional telephone survey of 19,165 adults in Canada, Germany, Italy, Sweden and the United Kingdom (Irwin et al., 2006). The questions asked participants to estimate the number of micturitions per day, episodes of urinary urgency per day, episodes of urine leakage associated

with urgency per day, episodes of stress incontinence per day, and the frequency of urinary disturbances (i.e., interrupted urine stream, pushing/straining to urinate, post-micturition dribble, sensation of incomplete emptying).<sup>30</sup> At the time of participant recruitment, the Urinary Symptom Questionnaire was the only available structured interview that inquired about the presence/absence of urinary symptoms in accordance with the 2002 International Continence Society definitions for LUT symptoms (Irwin et al., 2006). The interview questions were reproduced on paper and respondents provided yes/no or numerical answers (e.g., 10 voids/day, 2 UI episodes per day, etc.). Estimates of test-retest reliability and inter-rater reliability are not available for this instrument.<sup>31</sup>

The information collected via the Urinary Symptom Questionnaire, as well as the medical conditions/medications, was briefly reviewed by the interviewer, and clarified with the participant, as needed, prior to initiating the interview. The aim of this process was to ensure that participants' responses were congruent with OABS syndrome, and they were not currently experiencing symptoms that would indicate urgency associated with pain (e.g., interstitial cystitis), or other LUT pathology that would be expected to interfere with their experiential descriptions of urgency.

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<sup>30</sup> One question of the Urinary Symptom Questionnaire, which requested information regarding the presence of weak urinary stream, was erroneously omitted.

<sup>31</sup> Other reliable interviewer-administered questionnaires were available for use, but these did not meet the needs of the study due to their lack of congruence with the 2002 ICS guidelines (e.g., Shaw et al., 2002).

*ii. Interviews*

Interviews were used to obtain descriptions of one or more concrete situations in which participants lived through experiences of urinary urgency (Giorgi, 2008; Polkinghorne, 2005). All interviews were audiotaped and followed a semi-structured format that included three prepared questions (Table 6). Consistent with the principles of Gestalt psychology (Giorgi, 1989c), the interview was initiated with a request for participants to describe their history of urinary urgency and incontinence symptoms so as to establish rapport and heighten their access to details about the experience that might not ordinarily be in awareness during day-to-day functioning. The second question was taken directly from EPP research procedures (Giorgi, 1985a). The third and final question asked participants to comment upon the personal meaning of the symptoms was based in the phenomenological research methodology of Keen (1975)<sup>32</sup>. An open-ended, client-centered technique was used to facilitate the participants' verbal expressions during the interview (Hill, 2009; Rennie, 1998). Client-centered interviewing techniques (e.g., basic attending, listening and observing skills) ensured that the participants' experiential descriptions unfolded in a manner that was unique to the individual, and originated, as much as possible, from the interviewee.

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<sup>32</sup> The methodology of Keen (1975) is grounded in both interpretive and descriptive phenomenological approaches and its application in the project was later identified as an error of methodological inconsistency. This error is discussed in Chapter Six (Strengths and Limitations).

Table 6: Interview Schedule

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- (i.) Describe your history of urinary urgency and incontinence symptoms starting from your earliest memory and leading up to the present day.
  
- (ii.) Describe, in as much detail as possible, a situation in which you experienced urinary urgency.
  
- (iii.) What meaning did these events hold for you?\*

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\* Inclusion of this question was based in the methodology of Keen (1975) and later detected as a methodological error during supervision after the interviews were completed. See Footnote 32.

Questions and reflections were used during the interview to encourage participants to remain within a descriptive mode, and to avoid dwelling in explanatory or theoretical accounts of their behavior/experience (Giorgi, 1989c). As described in Chapter Three, the participants' verbal descriptions were considered revelatory of the world as it appeared in their experience and the source of lived meanings for analysis by the researcher (Giorgi, 1975c, 2008). The participant was viewed as an ordinary person from the *life-world* whose description is given from within the natural attitude - a phenomenologically-naïve position in which whatever is perceived about urinary urgency is posited as existent (i.e., what unfolded for them in real time) - and without having awareness of the phenomenological perspective adopted the researcher (Giorgi, 1975b, 1990). Study participants were deliberately not provided a definition of urinary urgency to avoid constraining their selection of situations that reflected their life-world understanding of the phenomenon (Giorgi, 1975a, 2008).

All of the data was collected prior to the initiation of analytic procedures (i.e., static sampling; Polkinghorne, 2005).

### *iii. Ethical Considerations*

The EPP method places a high priority on the transparency of research findings and their movement from everyday descriptions in the interview to psychologically-sensitive transformations, and finally to explicated meaning

structures. As such, it has become fairly common for EPP researchers to include full-length interviews and their analyses in graduate student dissertations and published journal articles (e.g., Giorgi, 1985*a*; Giorgi & Giorgi, 2003*b*). The publication of full-length interviews poses an ethical concern due to the increased probability of accidental disclosure of a participant's identity due to the substantial level of personal detail (Mellick & Fleming, 2010). To guard against violations of privacy, several procedures were employed to protect participants' anonymity in this research study. First, the procedures of audiotaping and transcribing of interviews, as well as confidentiality practices, were discussed with each individual prior to their study participation. Participants were offered an opportunity to rescind their consent at the end of the interview (i.e., when they had full awareness of the interview content). Second, participants were assigned a number as per order of study entry, which was used for identification purposes. Third, transcripts were reviewed for identifying information (e.g., doctor's names, locations, street names, etc.) and the information was deleted and modified using a placeholder (i.e., *Dr. [NAME], [street name], [city]*), as appropriate.

#### *iv. Sample Size and Transcript Selection*

Although ten women were interviewed in the study and ten transcripts were available for analysis, only three transcripts were analyzed. This decision was



motivated by the desire to apply the EPP approach and method in a way that was theoretically sound, while also considering the labor intensiveness of the method (Giorgi, 1994; Giorgi & Gallegos, 2005). Determination of the general features (i.e., essences) of urinary urgency required a sufficient number of instances of the phenomenon (e.g., empirical variations) to be present so that the differentiated meanings could be discovered and typified (Giorgi, 2008). Phenomenological psychologists recognize that a single transcript is usually not sufficient to generate general knowledge about a phenomenon of interest – the limited number of variations renders it more difficult to discriminate whether the features belong to the phenomenon-as-such or to “the idiographic way in which the person who happened to be the participant lived the phenomenon” (Giorgi, 2008, p. 50). In general, a sample size of three participants is considered sufficient to provide the number of variations needed to generate a single psychological structure (Giorgi, 2008).

Thus, in order to proceed, three transcripts needed to be selected. According to EPP, all *life-world* descriptions were considered equally admissible for investigation regardless of how they were collected.<sup>33</sup> Thus, in contrast to other qualitative research methodologies, face-to-face interviews, telephone interviews, and written descriptions of *life-world* phenomena are not pre-judged in terms of their

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<sup>33</sup> From the perspective of consciousness, any mode of transmission of a description articulates the act-object relations that can be apprehended by the researcher in the phenomenological attitude. According to phenomenological criteria, the mode of transmission was not grounds for *a priori* exclusion from the sampling frame.

contribution to an investigation. Moreover, once purposive sampling has taken place, the only *a priori* criterion for admissibility of a transcript is the procurement of a description of the phenomenon of interest from a participant.<sup>34</sup> Other admissibility criteria cannot be applied because the qualities of a phenomenon are made visible through the analytic work of the researcher conducted within the phenomenological reduction, which cannot be known at the time of transcript selection (Giorgi, 2009). As such, a method of random sampling (i.e., draw) was used to select three out of the ten available transcripts and minimize possibility of bias on the part of the researcher. Each of the ten participant codes was written onto a piece of paper that was folded and placed in a box. An individual not involved in the study was asked to remove three pieces of paper from the box.

The EPP method recognizes that the random selection of three interviews may not be a satisfactory sampling procedure because of the possibility of inadequate description (i.e., explanatory accounts), or descriptions that reveal phenomena other than the one of interest (i.e., urinary urgency). Determination about the adequacy of a description can be made only after the first transformation step of the EPP method is complete. Descriptions deemed inadequate by the researcher are presented in the scientific report with a rationale for the basis of its exclusion, and additional analysis may be necessary to ensure the minimum recommendation for three transcripts is met

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<sup>34</sup> The only imaginable circumstance in which *a priori* rejection of an interview may occur is if the interview question (to describe the phenomenon of urgency) had not been asked, or had been asked but not responded to.

(Giorgi, 2009). In this project, the randomly selected sample of three transcripts was determined to be adequate, given that the descriptions provided by participants were revelatory of the phenomenon under investigation, and each description contained at least one instance of the phenomenon under study.

### III. Analytic Procedure

The process of analysis involves use of the researcher's own subjectivity to encounter and examine the experienced or phenomenal objects in the participants' *life-world* descriptions of urinary urgency. It begins with the cultivation of a context in which she can encounter the phenomenon of interest "precisely as it is given" (Giorgi 1983a, p. 133). Then, during the explication of pre-reflective (lived) meanings, other phenomenological procedures (i.e., imaginative variation, eidetic analysis) are employed to determine which of these lived meanings are constitutive of the phenomenon of interest (i.e., essential for the phenomenon to appear). This section begins with a description of the phenomenological and psychological attitudes and abstentions required to establish this context, followed by a description of the steps of the method. Since this project began several years before a comprehensive book about EPP was available, the information in this section is based primarily on articles that guided the early stages of the project (i.e., Giorgi, 1985a, 2006a, 2008,

Giorgi & Giorgi, 2003a, 2003b), and supplemented with information from the book published in 2009 (i.e., Giorgi, 2009).

*i. Cultivating a Phenomenological Approach*

There are three essential components of a Husserlian-based phenomenological-psychological approach: (i.) the cultivation of a phenomenological attitude using methodological abstentions, (ii.) the adoption of a psychological attitude, and (iii.) a nomothetic focus on the phenomenon of interest. This section describes how each of these components was employed during the analysis of *life-world* descriptions of urinary urgency.

*Methodological Abstentions*

Since experience and behavior are intentional, individuals live through and behave according to certain meanings that may not be articulated or even in their awareness – that is, they are lived pre-reflectively<sup>35</sup> (Davidson, 2002; Giorgi, 1985a, 1997, 1998). Two methodological abstentions, *bracketing* and the phenomenological

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<sup>35</sup> To illustrate the concept of pre-reflective meanings, Giorgi (1998) explains that “everyday life is filled with expressed meanings, but we usually respond to these meanings directly, naively, and in conventional ways. For example, those who drive cars and stop at red lights and go on green ... never stop to think about why this system and color coding is used, or to worry about whether it is the best system. Drivers simply live these meanings without further thought...” (p. 26).

reduction or *epoché*, were employed to apprehend and explicate pre-reflective meanings<sup>36</sup>.

The *epoché* was executed by setting aside the natural attitude and regarding objects or events as a *phenomenon*; that is, as something that is appearing or presenting itself without making assertions that the phenomenon actually exists the way that it presents<sup>37</sup> (i.e., a presence rather than an existant; Giorgi, 2008, p. 41). In practical terms, the *epoché* involved shifting the researcher's attitudinal perspective so that the *life-world* descriptions were viewed as revelatory of *the way the situation existed for the subject*, but not necessarily *the way the situation was in itself*<sup>38</sup> (Giorgi, 1975a, 1983b, 2006a, 2006b). The second abstention, *bracketing*, was used to enhance focus on the instance of the phenomenon appearing to the researcher's consciousness by setting aside any personal (experiential) and/or theoretical knowledge (i.e., scientific formulations) about urinary urgency, regardless of source. The act of setting aside of prior knowledge about urinary urgency enabled greater attention towards the nuances and qualities of the situation for the experiencer in her phenomenal world (i.e., how the phenomenon was lived; Giorgi, 2008). Together, the methodological abstentions enabled the transformation from *life-world* accounts of

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<sup>36</sup> *Epoché* is pronounced as "ep-o-kay".

<sup>37</sup> A clinical example of the *epoché* occurs when a therapist is working with a paranoid client and is fully present to the situation as it exists for him/her, but the therapist does not make any assertions (or believe) that what the client has described actually unfolded in the way s/he says it did (i.e., an existant claim is withheld; Giorgi, 1994).

<sup>38</sup> More specifically, the participant's descriptions of the phenomena include both real and irreal objects (e.g., that have been intuited by consciousness), and so the *epoché* was engaged to bracket the existential status associated with the participants' experience of the real for the purpose of ensuring that all content was analysed in its phenomenal status (Giorgi, 1997).

urinary urgency into phenomenal accounts (e.g., as presences), which satisfied the minimum requirement for conducting eidetic analysis within a Husserlian project (Giorgi, 1986c).

### *Adoption of a Psychological Attitude*

The examination of psychological meanings in descriptions of experiential phenomena requires the adoption of a psychological perspective (or point of view) to thematize this particular aspect of the everyday world (Giorgi, 1976, 1983a, 1985a, 1986c, 1993b, 2006b, 2008). This attitude is enacted slightly differently across the phases of analysis. In the first two steps of the method, the adoption of a psychological point of view operates spontaneously and “as lived” by the researcher. For example, meaning units are discriminated when the researcher perceived a change in meaning that appeared to be psychological, and these shifts were perceived in a fully embodied and experiential way (Giorgi, 1985a, 2008). In later steps, the as-lived “sense” of the psychological was explicated by the researcher when participants’ descriptions were transformed into psychologically-sensitive expressions (Giorgi, 1985a). This “sense” of the psychological refers to both implicit and explicit emotional aspects in the transcripts, as well as the participants’ modes of presence with respect to their experiences (e.g., groping, unsure, half-starts). “Modes of presence” refer to how the experiences unfolded for the participant (e.g., a style), as well as how the participant construed the objects or events (i.e., noema constituted by

subject-dependent acts; Giorgi, 1986c), which are typically implicit in the descriptions of the phenomenon. For example, the modality in which an object became present to the participant's consciousness was made explicit by describing any memories, imaginations, perceptions, and awareness that were implicitly described by the participants (Giorgi & Giorgi, 2003a). The use of hypothetical constructs or psychological 'jargon' was avoided (Giorgi, 1994; Giorgi & Giorgi, 2003b). The clarification of the psychological realm became more explicit and further clarified as the analysis proceeded across steps.

#### *A Nomothetic Focus on the Phenomenon of Interest*

In addition to a psychological point of view, a nomothetic attitude was also cultivated. Since the objective of the analysis was to discover the general psychological characteristics (i.e., essential features) of the phenomenon of urinary urgency, each of the descriptions of urinary urgency provided by participants was viewed as an instance of the phenomenon in the *life-world*, and the specific situational details were examined in terms of what they revealed about the features of urinary urgency. Moreover, the analysis focused upon the participants' descriptions in terms of what they revealed about urgency (i.e., as a phenomenon-as-such) and not in terms

of what it revealed about the experiencer's worldview<sup>39</sup> (i.e., views of self/others/world, personal values, etc.; Giorgi, 1983*a*, 1985*a*, 1994, 2006*b*).

Participants' descriptions occasionally contained information that was not directly revelatory of urinary urgency (e.g., P1's discussion about her gastrointestinal health crises; Appendix F), possibly due to the complexity of the lived experience of health. Note, however, that maintaining focus on the phenomenon of interest did not require removal or delimitation of parts viewed as tangential, but instead, linguistic expressions were used to highlight and clarify the intentional relations regarding urinary urgency, whilst maintaining fidelity to other meanings contained within the units. To accomplish this task, a Gestalt perspective was applied such that the intentional relations regarding urinary urgency were posited as the figure in the meaning unit, while relations considered tangential to urinary urgency were posited as the ground or context.

## *ii. Steps of the Procedure*

After the phenomenological approach was cultivated, each of the four steps of the procedure was performed in turn. The first two steps were used to break the

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<sup>39</sup> The meaning of "understanding a phenomenon" in the EPP method is differentiated from "understanding a phenomenon" in a therapeutic context. In the latter, the psychologist focuses upon understanding a phenomenon in terms of what it reveals about an experiencer's worldview in the service of improving mental health or personal growth (Young, 2005).



transcript into parts, and the latter two transformed the idiographic and biographical descriptions of urinary urgency into more general statements that highlighted the psychological meanings of urinary urgency in incontinent women (Giorgi, 1986a, 1995b, 2006a, 2006b). The four steps were: (i.) reading the transcript for a sense of the whole, (ii.) the discrimination of meaning units, (iii.) transformation and reduction of the subject's everyday descriptions into phenomenological-psychological expressions (i.e., transformed meaning units or TMUs), and (iv.) synthesis of TMUs into a series of statements that reflected the essential aspects of all participants' experiences of urinary urgency, called a structure (Giorgi, 1975a, 1985a, 1989c, 2000d, 2000e, 2008). The first three steps were performed with each of the three transcripts (separately and in sequential order), and the final step was performed using the explicated meanings (TMUs) from all three transcripts after the third step was completed. This section describes each of the four steps in detail.

#### *Step One: Reading the Transcript for a Sense of the Whole*

In this step, the whole description was read (and listened to via audio) several times in order to gain a sense of the whole (Giorgi, 1989c). Empathy was used to cultivate a sense of what it would have been like to live through the participant's situation as described (Giorgi, 1975a, 2000e). This first step was performed in preparation for the subsequent step where the description is broken into parts. A

Gestalt theory of meaning informs the EPP approach, and as such, parts of the transcript were viewed in relation to a whole, and as related to each another. Thus, reading for a sense of the whole ensured that a global sense of the data was present to the researcher prior to the breaking up of the description into meaning units in the subsequent step. Attempts to interrogate the data were not carried out at this stage.

### *Step Two: Discrimination of Meaning Units*

The meanings contained in the whole transcript were too complex to analyze effectively, so the description was broken down into smaller units (meaning units or MUs) to facilitate analysis (Giorgi, 1989c). The text was marked spontaneously at points where a shift or transition in meaning for the subject was perceived (i.e., that was psychologically sensitive; Giorgi, 1985a, 1989c, 2000d). The process of meaning unit discrimination was engaged in a fully embodied and experiential way by cultivating sensitivity to those shifts in meaning even when the basis for such discriminations was not intellectually understood (Giorgi, 1985a, 1989c, 2008). In addition, an open attitude was maintained so that unexpected meanings could emerge (i.e., a context of discovery). During this step, participants' descriptions were not altered in any way (e.g., no removal/deletion of text, etc.), and parts were delineated while embedded in the original context of the whole transcript (Giorgi, 2006b). Meaning units were viewed as working parts that facilitate an explication of partial meanings as part of the overall process of elucidating a psychological structure. The

adopted attitude and set of the researcher was vital to the process of meaning unit discrimination and as such, meaning units were viewed as related to the researcher. As such, no claim was made that these meaning units exist in any true or real-world sense (i.e., “in themselves”; Giorgi, 1985a, 1997).

Occasionally, the size of discriminated meaning units was altered during the analysis. For example, certain MUs delineated in the second step were later found to be too large or small to explicate meanings effectively (i.e., in Step 3; Appendix G). When meaning units were too small, they were combined with other units, and identified by hyphenation of original MU numbers (i.e., merging of MU 1 and MU 2 became MU 1-2). Meaning units that were too large were split into smaller units identified by their original number and a letter of the alphabet (i.e., MU 1 became MU 1A, MU 1B, etc.).

### *Step Three: Transformation and Reduction of the Participants' Descriptions*

The third and fourth steps of the method involved a transformation and reduction of the experiential data regarding urinary urgency for the purpose of uncovering the essential characteristics or features of this phenomenon. Although the process of investigation began with the specific, concrete and idiographic descriptions provided by participants, the researcher's attitudes and activities in these two steps involved a process of typification so that general findings were produced as an

outcome of the analysis (Giorgi 2006a). This section summarizes the transformation and reduction of data performed in the third step, which involved a systematic working through of each delineated meaning unit within an individual protocol (i.e., as a separate unit). At least one transformation was performed for each meaning unit, and the product was called a transformed meaning unit, or TMU. All TMUs generated for a single transcript were recorded in a single analytic table and one table was constructed for each participant (Appendix G).

The transformation of participants' original descriptions into phenomenological-psychological expressions relied upon the use of my own processes of intuition to apprehend meanings, which were then expressed using psychologically-sensitive language (Giorgi, 1985a, 1997, 2009; Polkinghorne, 2005). The intuition of lived meanings was made possible by the cultivation of an intuitive presence to the situation in which the phenomenon unfolded in the *life-world*, so that the objects or events that initially appeared to the consciousness of the experiencer became present to my own consciousness (Giorgi, 1986a, 1998, 2006b). After coming into contact with these presences, the objects were described "precisely as they were presented", and without concern about whether or not they reflected the actual way the situation unfolded for the participant (i.e., existential status; Giorgi, 1998, p. 25). The sensitivity to psychological aspects of the phenomenon, as described earlier in this chapter (*Adoption of a Psychological Attitude*), resulted from a focus on the implicit or explicit emotional aspects in the transcripts, the

psychological implications of the *life-world* situation, and clarification of participants' modes of presence to their experience, how they construed objects or events (e.g., noemata constituted by subject-dependent acts; Giorgi, 1986c), and the modality in which an object became present to their consciousness (noeses). In certain meaning units, there was little or no psychological value present and so the facts of the meaning unit were re-stated in the TMU. Lastly, the process of interrogation was conducted with a focus on the phenomenon of interest, urinary urgency, and aided by asking the following question: "*what's happening in this meaning unit that is revealing something psychological about the phenomenon of urinary urgency?*" (Giorgi, 1989c, p. 50).

The transformation of participants' original descriptions into phenomenological-psychological expressions also involved re-writing of the original first person accounts into third-person statements in the first step from MUs to first TMUs (Giorgi, 2006b). For example, if a participant made statements such as "I imagined that..." or "I did it", they were re-written in third-person to say "P stated that he imagined that..." or "P stated that she did..." (Giorgi, 2006b). The result of this procedure was a written descriptive account of the researcher's own direct experience of intuitions (i.e., objects that presented to the researcher's consciousness and how they presented), which would otherwise not be accessible to others. These written records served two functions: (i.) to enhance the depth of analysis in the second (third, etc.) transformations due to re-examination and greater dwelling with

initial intuitions, and (ii.) to provide psychological distance between the researcher and the transcript content, which afforded protection against the researcher's projection of psychological content into the unit (i.e., overlay), as well as opportunities for self-correction when the intuitions were re-examined days or weeks after initially being generated. The written records also contribute to the overall methodological rigor and validity of the procedures.

Given the high level of openness maintained during the analysis, many intuitions became present to consciousness during the interrogation (i.e., meaning possibilities) and so a process of discernment was used to identify which were essential, psychologically speaking, for the appearance of the phenomenon (Giorgi, 1985*a*, 1986*c*, 2006*a*, 2006*b*). The process of discernment, known as the eidetic reduction, involved carrying out active reflection and imaginative variation within the attitudes and presuppositions of the EPP method (i.e., methodological abstentions; Giorgi, 1985*a*, 1989*c*, 1998, 2006*a*, 2008). First, while working within a meaning unit of a particular protocol, a shift in attitude was engaged so that the original participant description was viewed as an example of urinary urgency. The intuitions that became present to the researcher's consciousness were reflected upon and freely varied in imagination to ascertain which meanings were most relevant, psychologically speaking, for the appearance of the phenomenon (i.e., eidetic intuitions; Giorgi, 2006*a*). At the same time, the researcher actively attempted to describe the results of imaginative variation at a more abstract level relative to the

concrete lived situation (Giorgi, 1985*a*, 1986*a*, 1994, 2000*b*, 2006*b*). The purpose of this abstraction was to transform the idiographic and diverse experiences provided by the participant into nomothetic knowledge that, due to its generality, had value for the discipline (i.e., generalizability; Giorgi, 1983*a*, 1985*a*, 1994, 2006*a*, 2006*b*). The generalization conducted in this step was preparatory for the eidetic reduction performed in Step Four. The determination of whether the intuitions were relevant for the appearance of the phenomenon relied upon a fully embodied process within the researcher. Since the outcome of the research was to discover a descriptive structural expression regarding urinary urgency, one was not available *a priori*. Thus, as the researcher varied aspects of the phenomenon described in the meaning units, she relied upon her experiential sense of fit with the whole to determine whether the phenomenon retained its identity. Any instances that did not fit were considered not relevant for the essential characteristics of the phenomenon, and since they were determined to be contingently present, they were not considered further. Only the final selected eidetic intuitions (or meanings) were included in the analytic table (Appendix G), and, since the moment-to-moment process of imaginative variation was not recorded, the table does not reveal all of the content that initially appeared to the researcher's consciousness, nor the labor required to process them.

The TMUs were written and re-written until the final TMU explicated all of the implicit psychological meanings contained in the original descriptions provided by the participant, and the essential psychological aspects were apprehended and made

explicit. Given the Gestalt emphasis of the method, each transcript was worked with in its entirety to produce a complete set of TMUs before moving onto another set of TMUs in the same transcript, or to another protocol. In each transformation, all of the data in the original MUs was accounted for in the transformed MUs, at least implicitly (i.e., no material is deleted or ignored). Transformations were numbered in the order they were produced (e.g., first TMUs, second TMUs, and so on). When the process of transformation was repeated, already explicated content was used to generate the new TMUs (e.g., the generation of second TMUs relied upon the first TMUs).

#### *Step Four: Expressing the Structure of the Phenomenon*

This last step of the method was a continuation of the transformation and reduction procedures initiated in the third step and used a process of typification to produce a description of the essential features or characteristics of the phenomenon of urinary urgency in incontinent women (i.e., a psychological structure; Giorgi 2006a). The process was guided by the same principles and practices that guided the previous step (i.e., EPP attitudes and presuppositions, the phenomenological reduction, adoption of a psychological perspective). The data were summarized in the Results section of Chapter Five.

This step involved the generation of higher-level expressions of meaning using all of the variations of the urgency experience (i.e., all three transcripts) contained in the transformed meaning units. Similar to Step Three, the expressions were generated



after cultivating a shift in attitude so that the descriptions were viewed as examples of urinary urgency, and the intuitions that became present to the researcher's consciousness (i.e., Giorgi, 2006a). A descriptive summary (i.e., a structure) was written to articulate the qualities of the relationships between the participants, others, and the situation that were invariant across all instances of urinary urgency (Giorgi, 2009). Then, the meanings were reflected upon and varied in imagination to select the psychological meanings that were most relevant for the appearance of the phenomenon (i.e., to identify essential constituents) (Giorgi, 1985a, 2000e). The claim asserted about the final structure was that the essential characteristics form an experiential pattern that was necessary for a particular type of the phenomenon to be identified and recognized as such in everyday life (Giorgi, 1985a, 1986c, 2006a, 2006b).

After the structure was generated and described, a series of tasks were undertaken to validate it (Giorgi, 1998). First, the structure was challenged imaginatively to ascertain whether parts or the whole was erroneous. Second, an internal validity check was performed by ensuring that the structural description included all the essential intuitions (TMUs), at least implicitly (Giorgi, 2008). Third, a table was prepared to elaborate how the constituents of the structure were exemplified in the transformed meaning units of the three protocols (Giorgi, 1998). Lastly, the structure was elaborated in terms of how the constituents related to each

other and to the existing literature. The outcome of the last two steps was prepared as a written section in Chapter Five (Results).

The EPP protocol acknowledges that the number of structures cannot be ascertained *a priori*, and therefore, its methodology permits more than one structure to be written, with a maximum equal to the number of subjects in a study (i.e., a maximum of three structures in this study; Giorgi, 1997). In this study, a single structure of the experience was derived using all three transcripts. A verification process was undertaken to ensure that the psychological structure contained all of the explicated meanings of the transformed meaning units (at least implicitly) with all three of the protocols (Giorgi, 1985*a*, 1997).

As noted in Step Three, only the final constituents were included in the Results Section (Chapter Five), and since the moment-to-moment process of imaginative variation was not recorded, the interim higher level meanings that were considered by the researcher, as well as the labor to process them, were not included in the final presentation of the data.

#### IV. Methodological Supervision

With the support of my supervisor, Dr. Joel Katz, it was determined that direct methodological supervision by a trained phenomenologist was essential for completion of an EPP-based project. Dr. Amedeo Giorgi who is the originator of the

EPP method (Giorgi, 2009) agreed to serve as a supervisor for the data analysis and communication of the study findings. Dr. Giorgi's wife, Dr. Barbra Von Knorring-Giorgi, provided initial consultation regarding the planning and handling of participant interviews, until her untimely passing. The bulk of the supervision provided by Dr. A. Giorgi took place via recurrent electronic communication (i.e., e-mail), which was supplemented with one-to-one meetings via telephone, as needed. Dr. Giorgi reviewed all dissertation-related material, including chapters and transcript analyses (except the literature review in Chapter Two) and returned written feedback via post. In-person meetings took place where possible. Copies of Dr. Giorgi's written feedback were forwarded to Dr. Katz for his review.

Supervision included attention to the needs of the project, as well as to my own developmental needs related to developing a phenomenological perspective rooted in the philosophies of Husserl and Merleau-Ponty. Initially, Dr. Giorgi provided feedback about the quality of methodological abstentions (bracketing and the phenomenological reduction) and use of imaginative variation in my written transformations of the participants' original descriptions. On several occasions, additional feedback was provided regarding interview techniques relevant to phenomenological inquiry. Corrections to the transformed meaning units were made on the basis of Dr. Giorgi's written feedback on the methodological abstentions; interview-related feedback was useful for the design of future projects. In the final stage of analysis, Dr. Giorgi reviewed whole experiential structures to validate the

accuracy of the eidetic reduction and imaginative variation, as well as to evaluate the inclusiveness of the structure in relation to all of the generated TMUs. With respect to my developmental needs, particular attention was afforded to building an awareness of the decision-making relevant to a scientific phenomenological project and its divergence from quantitative modes of psychological research given my prior experience with natural science methodologies in the fields of biology and psychology. Dr. Giorgi also made recommendations regarding particular scholarship that should be examined to facilitate the developmental transition towards a phenomenological orientation.

## CHAPTER FIVE: RESULTS

The purpose of this chapter is to present the findings of this empirical phenomenological psychological investigation of urinary urgency in incontinent women. First, a brief summary of the demographic and health characteristics of the recruited participants is given, followed by a descriptive summary of the three interviews selected for analysis. Then, the structures of the lived experience of urinary urgency as experienced by incontinent women are presented, along with tables that demonstrate the connection between the constituents of the structure and the transformed meaning units of each transcript. Lastly, an expanded description of how each of the three participants actually lived through each constituent in the psychological structure is presented, and original excerpts from the participant interviews are used to illustrate the relationship between general (eidetic) findings and each participants' experience.

### I. Participants

The study was conducted at a private practice of an urologist in Southwestern Ontario (Canada) from July to November 2007. Fifty-six women, who had a diagnosis of OABS, or mixed UI with clinically significant urinary urgency, were identified and contacted by telephone. The final sample of study participants included

10 females with a mean (SD) age of  $68 \pm 7.2$  years (range: 56 to 77 years). A study number was assigned as per order of entry (e.g., 02-01 to 02-10). All participants were Caucasian and the mean (SD) number of years of education was  $13.5 \pm 1.8$ . Demographic and health characteristics of the ten participants are summarized in Tables 7 and 8, respectively. Reasons for non-participation in the study (n=46) included: no response to telephone call/voicemail (n=20), stated lack of interest/availability (n=19), phone service disconnected (n=4), remission of urinary symptoms (n=2), and failure to meet study inclusion/exclusion criteria (n=1).

The author (PCM) conducted each of the ten interviews. The length of the interviews ranged from 30 to 90 minutes in length. Eight interviews were conducted at the urology clinic, one interview was conducted over the telephone, and one interview was conducted at the home of a participant, as per her request. All interviews were audiotaped and transcribed by a professional transcriptionist. Analysis of the transcripts was initiated after all interviews had been completed so as to limit the influence of the researcher's own experiential learning on the data collection procedure (Giorgi, 1985*a*, 1989*c*).

## II. Selection of Transcripts for Analysis

Three study participants were randomly selected by an individual not involved in the study, which corresponded to the interviews of WL-02-01, WL-02-04, and

Table 7: Demographic Characteristics of All Study Participants (N=10)

<b>Characteristics</b>	<b>Number of Participants</b>
Race	
Caucasian	10
Age	
50-59	2
60-69	3
70-79	5
80+	0
Parity	
0	2
1	2
2	3
3+	3
Ethnicity	
European-Canadian	5
Canadian	3
Native Canadian	1
American Canadian	1
Education (y)	
≤12	3
13-14	3
15-16	4

Table 8: Lower Urinary Tract Symptoms and Health Status of Study Participants

<b>Health Status</b>	<b>Number of Participants (N=10)</b>
Lower Urinary Tract Symptoms <sup>1</sup>	
Urinary Urgency	10
Urge Incontinence	10
Stress Incontinence	5
Frequent Urination (>8 times/day)	6
Nocturia	7
Voiding Disturbances (intermittent stream, straining to void, incomplete emptying)	7
Lifetime Treatment(s) for Bladder Disorder	
Currently Using Medication	4
Pelvic Floor Exercises/Timed Voiding	10/1
Biofeedback	4
Surgery	6
Prior Hysterectomy <sup>2</sup>	5
No. Medications (At Time of Study Entry)	
0-1	3
2-3	4
4+	3
# Reporting Psychological Disorders	Anxiety = 1 Depression = 5
Years Since Diagnosis of Bladder Storage Disorder <sup>2</sup>	
<1	1
1-3	7
4-6	1

<sup>1</sup> Urinary symptoms were assessed with a structured questionnaire (Irwin et al., 2006; Appendix D). <sup>2</sup> One data point is missing.



WL-02-09 [hereafter referred to as P1, P2 and P3, respectively]. Interviews with P1 and P3 were conducted at a urology clinic, whereas the interview with P2 was conducted over the telephone. The transcripts of P1, P2, and P3 were verified for accuracy against the original audio-recording by this author, and identifying information was altered to protect confidentiality, as described in Chapter Four.

### III. Interview Summaries

This section presents a descriptive summary of the interviews with P1, P2 and P3, as well as their responses to the Urinary Symptom Questionnaire (Irwin et al., 2006; Appendix D). A listing of these participants' demographic characteristics, medical history and current medications is given in Table 9.

#### *P1.*

P1 is a 72 year old divorced woman who was diagnosed with urinary urgency and incontinence, as well as mild stress incontinence, approximately two years before the interview. In the interview, P1 reported that her awareness of urinary-related difficulties developed very gradually as she recovered from a number of serious health conditions in the three years before the interview took place. She recalled that her awareness of the problem began when she felt a sensation of wetness in her underwear, which was later identified as urine by a medical professional. P1

expressed doubt about the medical significance of the urine leakage she encountered, and wondered whether her problem might originate from a need for better hygiene on her part. She also noted that she had not identified patterns to her leakage experiences, and was uncertain about the value of her contribution to the study.

P1 described one situation in which she developed urinary urgency, involving an immediate need to get to a toilet. She was traveling by car with her husband to attend a seasonal celebration at the house of a family member, when she developed urgency and was unable to leave the highway to access a toilet while *en route* to her destination. She became incontinent as she got out of the car just outside of her family member's home. P1 felt embarrassed and self-conscious about the wetness in the crotch area of her pants that revealed her urine leakage to the family members who greeted her, and was concerned that guests in the home would see her. Her family provided assistance that enabled her to maintain a sense of dignity in the situation; they protected her from being discovered as incontinent by guests as she entered the home, and their provision of clean, dry clothes enabled her to join the festivities. For P1, the response of her family to the episode of urine leakage demonstrated their genuine care and affection for her.

The interview with P1 was not limited to the topic of urinary urgency. She sought to know more about what the researcher would achieve by interviewing women about their experiences of urinary urgency and incontinence from a psychological perspective. She also acknowledged her own interests in discussing the

transformative functions of the gastrointestinal tract (i.e., digestion), which she had come to better understand during her experiences with an ileostomy and colostomy, and invited me to discuss these topics as well. I answered P1's inquiries about the value of psychological research in bladder disorders by offering more details about my own interest in the bladder, and my aim to learn more about how people live with these disorders in their everyday lives. P1 expressed interest in participating in a support group for people with bladder disorders, as she understood the value of emotional support from health care professionals who understood chronic or difficult-to-manage conditions.

P1's responses to the Urinary Symptom Questionnaire (Irwin et al., 2006; Appendix D) revealed that urine leakage was a "constant" in her everyday life, and it occurred both with, and without, urinary urgency. She reported using a panty-liner to manage urinary leaks, and changed them approximately three times each day. With respect to the frequency of urinary urgency and urination (volitional voiding), P1 was unable to estimate how often she experienced these symptoms. She had tried oral (anticholinergic) medications to treat "the bladder urges". At the time of the interview, P1 reported that she was using Detrol<sup>®</sup>, and she had previously tried another medication (Ditropan<sup>®</sup>), as well as pelvic floor exercises, to treat the problem. P1 reported a history of other urological problems, including stress urinary incontinence (SUI; urine leakage in association with sneezing, coughing or physical

Table 9: Demographic Characteristics and Health History of Study Participants Selected for EPP Analysis

	<b>P1</b>	<b>P2</b>	<b>P3</b>
Age	72	58	74
Education	Grade 12	Bachelor's Degree	Bachelor's Degree
Parity	1	3	0
Medical History – Urinary System	OABS (Urgency, UI, 2005) SUI (2005) Urethral Collagen Injections (2006) Burch bladder neck suspension (1980's) “Holes in the bladder”(during labor/delivery)	OABS (Urgency, no urge UI; 2005) Mini-bladder repair (1984) UUI (1980)	OABS (Urinary Frequency, Urgency, UI, 2005) Vaginal Sling (2007)
Medical History – Other	Depression (2005) Incisional Hernia (2005) Diverticulosis (2004) Ileostomy, Colostomy (2004) Perioperative Heart Attack (2004) Partial Colon Removal (2003) Mononucleosis (1989) Hypertension (~1980s) Hysterectomy (~1980s) Severe Dehydration Unspecified Allergy	Hypothyroidism (2005) Mild Sleep Apnea (2000) Vaginal Hysterectomy (1984) Uterine Fibroid (1984)	Gastro-esophageal Reflux (2005) Sleep Apnea (2005) Diverticulitis (2004) Aneurysm (2001)
Current Medical Treatment	Altace® (High Blood Pressure) Imovane® (Sleep) Unspecified Drug (Allergy) Detrol® (OABS)	Unspecified Drug (Hormone Replacement) Unspecified Drug (Thyroid Replacement)	Aspirin (Aneurysm) Unspecified Drug (GERD) Unspecified Drug (Diverticulitis) Apnea machine

activities, such as lifting heavy objects), for which she had received urethral collagen injections, as well as an injury to her bladder during the delivery of her first and only child (Table 9)<sup>40</sup>.

*P2.*

P2 is a 58-year old married woman who was diagnosed with urinary urgency without incontinence (i.e., OABS-dry) by the urologist two years before the interview took place. Her medical record revealed a prior history of urinary urge incontinence over two decades earlier. In the interview, she disclosed a thirty-year history of urinary abnormalities, which began with an increase in the frequency of urination after her third and last pregnancy, and worsened about a decade later due to the presence of a large uterine fibroid. She became aware of instances of urine leakage associated with coughing or sneezing (i.e., SUI) sometime in her mid-forties. P2 had undergone a vaginal hysterectomy to remove the fibroid and a “mini” bladder lift, but did not perceive any improvement in urination frequency thereafter. P2 was motivated to seek additional medical advice by her desire to be physically active (e.g., sports) and concern about the worsening of her urinary abnormalities over time. She tried non-surgical modalities of treatment, including medication and pelvic floor exercises, and reported a beneficial impact from the latter. At the time of the

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<sup>40</sup> P1 described the childbirth-related injury as “holes in the bladder”, which, according to the study’s co-investigator (a licensed urologist), was considered likely to refer to an injury during a cesarean section, or a tear during a vaginal delivery. Further information about this medical condition was not available.

interview, P2 reported a recent worsening in the frequency of urination (i.e., in the last three to four years), but her experience of urine leakage remained about the same, and urinary urgency was less problematic (which she attributed to her continuing practice of pelvic floor exercises). She remained contemplative about undergoing surgery to alleviate her urinary symptoms in the future, and acknowledged that she continued to wear pads in situations where she anticipated that she might leak (i.e., sports, lifting heavy objects, etc.).

During the interview, P2 described nine situations in which she encountered urgency or the immediate need to get to a toilet. In five of these situations, P2 was participating in physical activities (i.e., running a marathon) when she experienced stress leakage; that is, urine leakage in relation to physical exertion or coughing/sneezing, and resulted in wetness on her clothing. She identified two of these five situations as involving urgency. In one of these instances, she needed to seek out a toilet immediately after her clothing had become saturated with urine in public.

Aside from the episodes of stress leakage, P2 described four other situations in which she developed an immediate need to get to a toilet in response to an extremely strong desire to void that arose either when she encountered delays during her commute to/from work (i.e., traffic, inclement weather, accidents, etc.) or when she was working in a meeting. In one of the examples described by P2, she developed a desperate need to get to a toilet when her desire to void became extremely strong after

encountering delays on her homeward bound commute during a heavy snowstorm, and the environmental conditions made it difficult for her to leave the highway to access a toilet *en route*. In this instance, she pulled the car to the highway shoulder and urinated at the side of the highway as a last resort. Both urinary urgency and incontinence had personal and professional consequences for P2. Her strong need to use a toilet in corporate settings compelled her to discuss her urinary-related situational needs with colleagues (e.g., to excuse herself, to ask for help to locate a toilet), which challenged her view of herself as a competent and effective professional. In non-work settings, urine leakage disrupted her activities, both in a physical/material sense (e.g., compelling her to stop her activities to change her clothes) as well as in a psychological sense (e.g., detracting from her feelings of satisfaction about winning the race in her age category). Thus, P2's feelings of incompetence in relation to urinary control was not limited to the workplace, but included other domains in her personal life, such as athletic performance.

P2's responses to the Urinary Symptom Questionnaire (Irwin et al., 2006; Appendix D) revealed that she voided approximately every hour during the day (e.g., about 10-12 times/day), which she perceived as "too often". She also rose from sleep to urinate approximately once per night, every night of the week. Initially, P2 stated that she did not experience urinary incontinence or urgency incontinence, but later acknowledged that she did experience urine leakage while *en route* to the toilet, as well as leakage after rising from the toilet after a void. P2 reported that she leaks

urine in connection with sneezing, coughing or doing physical activities (e.g., lifting, etc.) about every other day. She also encountered several other voiding-related symptoms, including intermittent stream, terminal dribble, the sensation of incomplete emptying (“all the time”) and post-micturition dribble (1-2 times per day). P2 clarified that, after urinating, when she felt her bladder was not empty she would physically push down on her abdomen or strain (via internal muscular movements) to ensure that all of the urine had been evacuated. At the time of the interview, P2 reported that she was not using any medication to treat her urinary symptoms, but she had previously tried two anti-cholinergic medications (unspecified brand), as well as pelvic floor muscle exercises.

*P3.*

P3 is a 74-year old divorced woman who suffered from urinary urgency and incontinence, and received a medical diagnosis approximately two years before the interview. She recalled that her awareness of urinary problems began about 3 to 4 years before the interview, when she experienced urinary urgency and had a feeling that there was an internal physical mass near/on her vagina, which she believed was the bladder (or another organ) that had “dropped”. She recalled that her initial sense of urgency entailed a more frequent need to urinate, but over time, worsened to include urine leakage. P3’s descriptions of her current difficulties with urination



stood in sharp contrast to her previous sense of ease in regulating when and where she urinated while working as a classroom teacher.

Two months prior to the interview, P3 underwent a vaginal sling procedure, but she did not notice any improvement in urinary urgency or incontinence afterwards. She endured several unwanted side effects from the surgery, however. Her surgeon mistakenly injured her bladder during the procedure and she required several additional days in hospital to heal. More distressing for P3, however, was that she became unable to urinate from a seated position after the surgery. Although the surgeon disconnected the sling during a follow-up appointment about one month after the surgery, P3 had not regained the ability to urinate from a seated position.

During the interview, P3 offered descriptions of seven instances in which she experienced urinary urgency. She stated that she typically perceived urinary urgency as she rose up from a seated or supine position (e.g., her couch, bed or when in a car) and there was an impending flow of urine. Despite her immediate attempts to get to the toilet as quickly as possible, she usually leaked urine while *en route* to the toilet. Occasionally, P3 was able to arrive at the toilet quickly enough that she was able to void in the toilet and avert any urine leakage; these instances were rare, however, and she wore a pad all the time because she expected to leak urine on her clothes. Aside from these typical instances, P3 also acknowledged that she experienced urgency after feeling an (unexpected) flow of urine when she was in a casino.

P3 described the secondary health effects related to her urinary condition and the associated disruption in her normal patterns of everyday life. She reported that her need to urinate at night disturbed her sleep patterns, and she was reluctant to drink fluids because she believed it would worsen the problem. Moreover, P3 limited her everyday activities (e.g., shopping, etc.) to places where she knows the location of the washrooms so that she could respond quickly to the feeling of urgency, if one arose.

P3's responses to the Urinary Symptom Questionnaire (Irwin et al., 2006; Appendix D) revealed that she voided approximately three times per day, which she did not perceive as "too often", and she rose from sleep to urinate about five times per night. P3 reported experiencing urinary urgency (i.e., a sudden compelling desire to urinate which is difficult to put off) approximately three times per day, as well as urine leakage three times per day. P3 reported that she leaked urine in connection with urinary urgency (3 times per day), but not in association with physical activities, sneezing or coughing (i.e., stress leakage). P3 reported the presence of several other voiding-related symptoms; including intermittent stream (6 times in last month), straining to begin urination (8 times in last month), terminal dribble, sensation of incomplete emptying (6 times in last month) and post-micturition dribble (6 times in last month). P3 clarified that, after urinating, when she felt her bladder was not empty she would physically push down on her abdomen or strain (via internal muscular movements) to ensure that all of the urine had been evacuated (10 times/month). At the time of the interview, P3 reported that she was not using medications to treat her

urinary symptoms, but she had previously tried an anti-cholinergic medication (Detrol<sup>®</sup>) and pelvic floor muscle exercises. Despite the difficulties associated with P3's first vaginal sling procedure, she remains contemplative about undergoing another surgery to try to alleviate her urinary symptoms.

#### IV. Psychological Structure of Urinary Urgency in Incontinent Women

The aim of this qualitative investigation was to examine the experience of urinary urgency which referred to the intense desire or motivation to urinate that terminated in a controlled or uncontrolled void. All three of the protocols examined in this study (P1, P2 and P3) contained at least one description of this experience and thus, each of them was used to generate the psychological structure. A single structure using all three transcripts (P1, P2 and P3) was used to express the experiential patterns of urinary urgency observed in this study. In this section, the psychological structure of the lived experience of urinary urgency is presented first, with the constituents identified in **bold** text, followed by a table illustrating the connection between the constituents of a psychological structure and the researcher's transformed meaning units. An elaboration of the relationships between the constituents and the original descriptions provided by the participants is given in the last section of this chapter. Verbatim transcriptions of the participants' descriptions

of urinary urgency provided in the interview, as well as the researcher's transformed meaning units, are given in Appendices E and F.

The following psychological structure of the lived experience of urinary urgency in incontinent women synthesizes the transformed meaning units of P1, P2 and P3 (P. refers to the generalized subject or participant):

For the Participant (P.), the experience of urinary urgency is episodic. It involves a **situational awareness of the inefficacy to contain urine**, as well as a sense of **pressure and uncertainty** with respect to reaching a toilet. In social and/or professional situations, P. encounters **emotional distress, embarrassment** and a **sense of inadequacy** when her **urinary flow is disclosed** to others, which she attempts to alleviate or avoid using **material, psychological, relational, and medical strategies**. When P.'s access to toilets is hindered by the presence of **idiographic health and environmental circumstances**, the emotional impact is intensified.

The above structure suggests the following eight constituents: (i.) situational awareness of the inefficacy to contain urine, (ii.) pressure and uncertainty to reach toilet, (iii.) emotional distress, (iv.) embarrassment, (v.) a sense of inadequacy, (vi.) disclosure of urinary flow, (vii.) material, psychological, relational and medical strategies, and (viii.) idiographic health and environmental circumstances. Table 10 provides a record of every instance in which these constituents appear in the protocols of P1, P2 and P3.

Table 10: Connection between Each Constituent in the Structure of Urinary Urgency and the Transformed Meaning Units of P1, P2, and P3

Constituents	P1	P2	P3
Situational Awareness of Inefficacy to Contain Urine	<p>26/ P1 was a passenger in a car <i>en route</i> to a family member’s home for a seasonal celebration when she became aware of the need to urinate. P1 was afraid that she would not be able to put off urination long enough to reach her destination.</p>	<p>10/ P2 stated that she perceives less “urgency” compared to years past because her physical activities are not disrupted by urine leakage. P2 does not use pads everyday, but will use them in situations that she predicts leakage may occur (e.g., sports, lifting) as a precaution against wetting herself.</p> <p>13/ P2 encountered several instances when she worked outside her home and experienced a urine leakage that forced her to cease her activity and go in and change clothes.</p> <p>17/ P2 stated that on those days when she commutes to work in another city (by car), she often experiences a “urinary urgency” (a desperate urge to urinate) as she nears her destination.</p> <p>19B/ P2 recalled that, for several years, she often experienced “urinary urgency” (strong desire to void) in meetings at work and felt distressed about her need to leave the meeting to urinate while co-workers</p>	<p>5/ P3 implied that her sense of urgency has worsened over time. When she first became aware of the feeling that her bladder “dropped” in her vagina, her sense of urgency involved a more frequent need to urinate. At present, P3’s sense of urgency involves occasional urine leakage that is both unintentional and unpredictable.</p> <p>6/ P3 experiences urgency when she stands up (from being seated) and perceives that an unintentional flow of urine has begun.</p> <p>7/ P3 stated that she feels less able to control when and where she urinates now compared to years ago.</p> <p>12/ P3 typically experiences incontinence after urinary urgency. As she stands up (from being seated), she perceives the beginning of unintentional urine flow that she cannot control, and makes a desperate attempt to reach a toilet.</p> <p>19/ For P3, the main problem with her bladder</p>

		<p>continued to work without her.</p> <p>22-23A/ P2 stated that she encountered “urinary urgency”, as well as emotional distress, after being delayed while commuting. The “urinary urgency” arose when P2, who had a desperate need to urinate, encountered (environmental) obstacles that interfered with locating a toilet.</p> <p>26/ P2 was surprised by the rapidity of the urine flow released from her body as she began to run.</p> <p>31A-31B/ P2’s sense of “urinary urgency” arose after urine began to pour out onto her clothing while running.</p> <p>36/ P2 stated that she regularly experienced urine leakage when she played baseball over a period of six years.</p> <p>38/ P2 acknowledged her annoyance about having to stop the car to urinate when traveling greater than one hour while on her way to and from work.</p> <p>40/ In response to I.’s query, P2 stated that she develops a desperate need to void (“urinary urgency”) when the time it normally takes her to</p>	<p>is “urgency”. In these situations, P3 becomes aware of her need to urinate after urine has already begun to flow (without her intention to release any).</p> <p>26-27/ P3’s experiences of urgency and incontinence occur when she rises from a standing position after being seated (“stand up urgency”). After getting up, P3 becomes aware of a flow of urine from her body, which begins without any intention on her part. For P3, the “urgency” refers to her striving to reach the toilet as fast as possible because the process of urination, albeit unintentional, has already begun.</p> <p>41-42/ P3 stated that she will experience urine leakage at night when “urgency” is present because the urine begins to flow out of her body (incontinence) as she is <i>enroute</i> to the toilet and she is unable to reach the toilet before the urine leaks out.</p> <p>48/ On one occasion, P3 was visiting a casino when she began urinating (unintentionally) while playing at one of the machines. P3 rushed to pack up her things and</p>
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		<p>commute to work is extended by one or more unpredictable events (volume of traffic, accidents, etc) <i>en route</i>.</p>	<p>get to the toilet, however, by the time she reached it, the pad had become saturated with urine and her clothing was wet.</p> <p>49/ P3 clarified that she feels urgency when stands up from a seated position, which is very unpleasant for her, but not while she is seated.</p> <p>50/ P3 stated that she feels urgency while rising from a seated position as she gets out of her car, and leaks a bit of urine.</p> <p>55/ P3 stated that the episode of urine leakage in the casino came on very suddenly and unexpectedly, and she is relieved that she does not encounter these situations very often.</p> <p>57/ P3 clarified that once the urine flow (leakage) started in the casino, she felt powerless to do anything to stop it. P3 implied that the urine leakage stops only after her bladder is fully empty.</p>
<p>Pressure and Uncertainty to Reach a Toilet</p>	<p>26/ P1 was a passenger in a car <i>en route</i> to a family member's home for a seasonal celebration when she became aware of the need to urinate. P1 was afraid that she would not be able to put off</p>	<p>18/ For P2, the most disturbing aspect of the "urinary urgency" occurs when she arrives at the workplace. When P2 is delayed by traffic conditions, she feels stressed about arriving at</p>	<p>6/ For P3, the urine flow cannot be controlled, and she is desperate to reach a toilet before she wets her clothing. However, P3 is often unable to get to the toilet without wetting herself, even if it</p>

	<p>urination long enough to reach her destination. P1's sense of uncertainty, panic and powerlessness heightened alongside her awareness of the obstacles preventing an accelerated arrival at her destination. P1's husband was also upset.</p> <p>27A/ For P1, the feeling of the urge to urinate is problematic when she is not in close proximity to a bathroom, and especially when she is in a moving vehicle.</p>	<p>her work commitment on time. She is delayed further when she is unable to locate a toilet and has to ask someone for help.</p> <p>22-23A/ The "urinary urgency" arose when P2, who had a desperate need to urinate, encountered (environmental) obstacles that interfered with locating a toilet. P2 reacted with disgust about the situation, and she initially attempted to delay voiding until she arrived home. However, in the face of intolerable (physical) discomfort and a sense of inefficacy that her behavior could bring about a conventional way to urinate,</p> <p>29A/ P2's initial anticipation of using a toilet that came into view dissipated when she noticed the race spectators that lined the route. P2 feared that spectators would see her in the urine-saturated clothing and cancelled her plan to use the toilet.</p> <p>40/ In response to I.'s query, P2 stated that she develops a desperate need to void ("urinary urgency") when the time it normally takes her to commute to work is extended by one or more unpredictable events</p>	<p>is in close proximity, so she wears a pad at all times to contain the urine leakage.</p> <p>12/ As she stands up (from being seated), she perceives the beginning of unintentional urine flow that she cannot control, and makes a desperate attempt to reach a toilet. Although the toilet is very close, she will usually lose urine in her clothes while <i>enroute</i>, but sometimes avoid an accident because she reaches the toilet before any leakage occurs.</p> <p>19/ She responds with a desperate rush to the toilet in the hope of getting there before the urine comes out. Typically, she does lose urine in places other than the toilet, including her clothes.</p> <p>26-27/ For P3, the "urgency" refers to her striving to reach the toilet as fast as possible because the process of urination, albeit unintentional, has already begun. P3 wears a pad all the time now because she anticipates that she will leak in these situations.</p> <p>45-47/ First, she learns where the toilets are so</p>
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		<p>(volume of traffic, accidents, etc) <i>en route</i>. In these situations, P2 feels conflicted because she is left with very little time to get to the office promptly, and yet she also needs to satisfy her immediate urinary needs. P2 feels compelled to choose between two equally unpalatable actions. On the one hand, she can immediately satisfy her urinary needs but displease her colleagues by being late. On the other hand, she can ignore her urinary needs to facilitate a timely arrival, but she will subsequently need to disclose to colleagues that she needs to use the toilet, which leaves P2 feeling inadequate.</p>	<p>that she can rush to use them when urgency happens, and preferably before urine leaks out. In instances when she does not reach the toilet quickly enough and leakage does occur, she wears a pad to contain the leak, and wears dark clothes to ensure that any seepage onto her clothes is concealed.</p> <p>48/ P3 rushed to pack up her things and get to the toilet, however, by the time she reached it, the pad had become saturated with urine and her clothing was wet. P3, who was surprised by the amount of the leak, and the failure of the pad to contain all of it, implied that these instances occur rarely for her.</p> <p>50/ P3 stated that she feels urgency while rising from a seated position as she gets out of her car, and leaks a bit of urine. P3 seeks out a toilet to urinate, but one is not always available to her. When a toilet is available, she feels reassured when she is able to fully empty her bladder and thus, avoid future leaks. When a toilet is not available, she lives with the uncertainty that future leakage might occur.</p>
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			<p>53-54/ P3 limits her activities to places where she knows where the washrooms are so that she can respond to the feeling of urgency by toileting promptly. P3 implied that she is willing to restrict her freedom of activity so that she can be confident about using the toilet when urgency appears, rather than to venture out into novel area, which would require reliance on pads.</p> <p>55/ P3 stated that the episode of urine leakage in the casino came on very suddenly and unexpectedly, and she is relieved that she does not encounter these situations very often.</p>
Emotional Distress	27B/ P1's clothes became saturated with urine and it was an extremely emotional moment for her.	<p>19A/ P2 stated that the frequency with which she needs to urinate is distressing and disruptive at the workplace, but not bothersome when she is in the privacy of her home.</p> <p>19B/ P2 recalled that, for several years, she often experienced "urinary urgency" (strong desire to void) in meetings at work and felt distressed about her need to leave the meeting to urinate while co-workers continued to work</p>	<p>48/ P3 rushed to pack up her things and get to the toilet, however, by the time she reached it, the pad had become saturated with urine and her clothing was wet. P3, who was surprised by the amount of the leak, and the failure of the pad to contain all of it, implied that these instances occur rarely for her.</p> <p>55/ P3 stated that the episode of urine leakage in the casino came on very suddenly and</p>

		<p>without her.</p> <p>23B/ P2 stated that she becomes quite distressed and embarrassed when she needs to go to the toilet and other people don't have to, but even more distressed when traveling in a car and feeling ineffective when she is unable to locate a bathroom.</p> <p>27-28/ P2 felt a sense of dread and horror as the urine poured out of her and saturated her treasured new running outfit in front of the race spectators. P2 expressed frustration about the lack of options to deal with the extensive wetness that could not be concealed from others. For P2, this was the worst nightmare of her life, however her sense of anonymity in the town provided some relief for her.</p> <p>34/ P2 acknowledges that the urine leakage was quite distressing and embarrassing when it happened, and because of her commitment to continue running, she felt motivated to see a healthcare provider to take care of the problem.</p> <p>40/ In these situations, P2 feels conflicted because she is left with</p>	<p>unexpectedly, and she is relieved that she does not encounter these situations very often.</p> <p>57/ P3 clarified that once the urine flow (leakage) started in the casino, she felt powerless to do anything to stop it. P3 implied that the urine leakage stops only after her bladder is fully empty.</p>
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		<p>very little time to get to the office promptly, and yet she also needs to satisfy her immediate urinary needs. P2 feels compelled to choose between two equally unpalatable actions. On the one hand, she can immediately satisfy her urinary needs but displease her colleagues by being late. On the other hand, she can ignore her urinary needs to facilitate a timely arrival, but she will subsequently need to disclose to colleagues that she needs to use the toilet, which leaves P2 feeling inadequate.</p>	
<p>Embarrassment (About Disclosure of Urinary Flow)</p>	<p>28/ P1 felt self-conscious about the wet clothes that revealed her accidental loss of urine, and was concerned that other houseguests would see her.</p> <p>29A/ P1 was very embarrassed about her urine loss and especially the location of the wet spots.</p> <p>29B/ P1 felt intense emotional pain and regret about the unintentional urine loss that occurred in the presence of her family and other guests.</p>	<p>18/ P2 implied that she feels humiliated about having to ask for help in finding a toilet and would prefer to avoid these situations.</p> <p>19B/ P2 implied that, despite her “urinary urgency” (desperate need to use the toilet) she was uncomfortable (embarrassed) making the suggestion for a toilet break, and hoped a co-worker would do so instead. P2 doesn’t like to be the one who calls for a break at a meeting, perhaps because it inadvertently calls attention to her own need for a urinary break.</p>	<p>45-47/ When P3 goes out shopping or in public places, her actions seek to prevent the embarrassment of being detected as “incontinent” by others.</p> <p>51-52/ Given the extent of wetness on P3’s clothes, the only option was to leave the casino. P3 threw out the pad, which was completely saturated with urine, and did not have a replacement. She placed some paper in the crotch of her underwear as a temporary pad until she arrived home.</p>

		<p>20/ P2 stated that when she attends or leads professional workshops, she feels comfortable (does not experience distress) when responding to her typical urinary needs <i>ad libitum</i>. In these situations, P2 either responds to her urinary needs autonomously (i.e., she is in charge of the breaks) or she is able to use the toilet without drawing the attention of others, and thus, averting embarrassment.</p> <p>22-23A/ However, in the face of intolerable (physical) discomfort and a sense of inefficacy that her behavior could bring about a conventional way to urinate, P2 felt compelled to use a less conventional way to satisfy her imminent need to urinate without being seen by others– on the shoulder of the highway. P2 implied that urinating in this way was undignified, and she was relieved by the knowledge that no one saw her do it.</p> <p>23B/ P2 stated that she becomes quite distressed and embarrassed when she needs to go to the toilet and other people don't have to, but even more distressed when traveling in a car and</p>	
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		<p>feeling ineffective when she is unable to locate a bathroom.</p> <p>27-28/ P2 felt a sense of dread and horror as the urine poured out of her and saturated her treasured new running outfit in front of the race spectators. P2 expressed frustration about the lack of options to deal with the extensive wetness that could not be concealed from others. For P2, this was the worst nightmare of her life, however her sense of anonymity in the town provided some relief for her.</p> <p>29A/ P2's initial anticipation of using a toilet that came into view dissipated when she noticed the race spectators that lined the route. P2 feared that spectators would see her in the urine-saturated clothing and cancelled her plan to use the toilet.</p> <p>32/ For P2, being covered in urine in front of others aroused feelings of embarrassment and dread. P2 sense of anonymity in the city where it happened seemed to alleviate any threats to her sense of dignity (esteem), but she was aware that the impact would have been</p>	
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		<p>more detrimental if she had been in her own hometown.</p> <p>34/ P2 acknowledges that the urine leakage was quite distressing and embarrassing when it happened, and because of her commitment to continue running, she felt motivated to see a healthcare provider to take care of the problem.</p> <p>36/ P2 stated that she regularly experienced urine leakage when she played baseball over a period of six years. The leakage became a problem for P2 only when she forgot to wear pads because certain body movements could cause embarrassing leaks.</p> <p>41/ P2 acknowledged that, occasionally, she has acted on her urinary needs immediately, and took the initiative to advise colleagues/clients that she would be arriving later than expected. P2 omitted the genuine reason for her lateness, that is, her need to urinate, which enabled her to maintain a sense of competence in relation to her colleagues.</p> <p>42/ P2 elaborated that her feelings about asking colleagues about toilet</p>	
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		<p>use is influenced by the context. In non-corporate (public) work settings, P2 encounters women of similar age and she feels comfortable disclosing her need to use the toilet. In corporate environments, however, P2 feels uncomfortable and embarrassed when excusing herself to urinate in front of male colleagues.</p>	
<p>Sense of Inadequacy</p>	<p>29B/ P1 felt intense emotional pain and regret about the unintentional urine loss that occurred in the presence of her family and other guests. P1 experienced a painful loss of self-respect, and her family's attempts to provide consolation did not alleviate her distress.</p> <p>34/ P1 was appreciative of her family's help, which afforded protection from the humiliation she expected to undergo. P1 felt less troubled when her family later laughed about the incident, which provided levity about the incident.</p>	<p>22-23A/ P2 implied that urinating in this way was undignified, and she was relieved by the knowledge that no one saw her do it.</p> <p>29B/ Although P2's actions offered partial relief of her discomfort by concealing her indiscretion from others, they were not sufficient to restore her sense of self-respect.</p> <p>33A/ P2 was angry that her success in winning the race was overshadowed by her feeling of incompetence in controlling (regulating) urination.</p> <p>36/ During the game, P2 averted embarrassment by restraining body movements that she anticipated would bring about leakage, but her actions compromised her</p>	<p>51-52/ Given the extent of wetness on P3's clothes, the only option was to leave the casino. P3 threw out the pad, which was completely saturated with urine, and did not have a replacement. She placed some paper in the crotch of her underwear as a temporary pad until she arrived home.</p>



		<p>sense of effectiveness in the sport (baseball).</p> <p>37/ P2 is aware that leaking urine in front of others injured her sense of self-respect.</p> <p>38/ For P2, learning the locations of available toilets along her route of travel has been a vital strategy to avoid experiencing a “urinary urgency”, but she feels that her freedom is limited due to restricting travel to routes where she has knowledge of toilet locations.</p> <p>39B/ P2’s awareness of the age difference between herself and her trainees, and her need to frequently excuse herself from meetings to urinate, challenges her view of herself as an effective and modern professional.</p> <p>*39C/. P2 implies that the continuous attention she needs to devote to her urinary problems challenges her view of herself as an effective and responsive professional while at work.</p> <p>40/ P2 feels compelled to choose between two equally unpalatable actions. On the one hand, she can immediately satisfy her</p>	
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		<p>urinary needs but displease her colleagues by being late. On the other hand, she can ignore her urinary needs to facilitate a timely arrival, but she will subsequently need to disclose to colleagues that she needs to use the toilet, which leaves P2 feeling inadequate. Urinary urgency often puts P2 in a situation where her self-image as a responsible “worker” is challenged.</p> <p>41/ P2 omitted the genuine reason for her lateness, that is, her need to urinate, which enabled her to maintain a sense of competence in relation to her colleagues. Privately, however, P2 views her urinary needs as a personal shortcoming (or inadequacy).</p> <p>42/ In these latter situations, P2’s disclosure about the need to urinate diminishes her sense of potency (strength) in the workplace.</p> <p>43-44/ P2 stated that in order for her to feel effective in work meetings, she restricts her fluid consumption to avoid needing to take breaks to use the toilet, even when her own thirst is compelling. P2</p>	
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		acknowledged feeling envious of younger women whom she presumes do not experience the urinary problems she has (frequency, urgency) and whom she views as “free” to consume fluids <i>ad libitum</i> in this context.	
Disclosure of Urinary Flow	27B/ As P1 emerged out of the car at her destination, she felt powerless to stop the release of urine. P1’s clothes became saturated with urine and it was an extremely emotional moment for her.	<p>18/ For P2, the most disturbing aspect of the “urinary urgency” occurs when she arrives at the workplace. When P2 is delayed by traffic conditions, she feels stressed about arriving at her work commitment on time. She is delayed further when she is unable to locate a toilet and has to ask someone for help.</p> <p>19B/ P2 doesn’t like to be the one who calls for a break at a meeting, perhaps because it inadvertently calls attention to her own need for a urinary break.</p> <p>20/ P2 stated that when she attends or leads professional workshops, she feels comfortable (does not experience distress) when responding to her typical urinary needs <i>ad libitum</i>. In these situations, P2 either responds to her urinary needs autonomously (i.e., she is in charge of the breaks)</p>	48/ On one occasion, P3 was visiting a casino when she began urinating (unintentionally) while playing at one of the machines. P3 rushed to pack up her things and get to the toilet, however, by the time she reached it, the pad had become saturated with urine and her clothing was wet.

		<p>or she is able to use the toilet without drawing the attention of others, and thus, averting embarrassment. With respect to urination, P2 reports a greater level of comfort in the context of workshops (MU#20) than in the work meetings (MU#19).</p> <p>22-23A/ However, in the face of intolerable (physical) discomfort and a sense of inefficacy that her behavior could bring about a conventional way to urinate, P2 felt compelled to use a less conventional way to satisfy her imminent need to urinate without being seen by others– on the shoulder of the highway. P2 implied that urinating in this way was undignified, and she was relieved by the knowledge that no one saw her do it.</p> <p>27-28/ P2 felt a sense of dread and horror as the urine poured out of her and saturated her treasured new running outfit in front of the race spectators.</p> <p>36/ P2 stated that she regularly experienced urine leakage when she played baseball over a period of six years. The leakage became a problem for P2 only</p>	
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		<p>when she forgot to wear pads because certain body movements could cause embarrassing leaks.</p> <p>39B/ P2's awareness of the age difference between herself and her trainees, and her need to frequently excuse herself from meetings to urinate, challenges her view of herself as an effective and modern professional.</p> <p>42/ P2 elaborated that her feelings about asking colleagues about toilet use is influenced by the context. In non-corporate (public) work settings, P2 encounters women of similar age and she feels comfortable disclosing her need to use the toilet. In corporate environments, however, P2 feels uncomfortable and embarrassed when excusing herself to urinate in front of male colleagues.</p>	
<p>Material, Psychological, Relational, and Medical Strategies</p>	<p>7/ The onset of P1's urinary symptoms began with an awareness of a wet sensation in her underwear, which was later identified as urine by a medical professional.</p> <p>9/ The wetness experienced by P1 is limited to a concealed</p>	<p>5A/ P2 stated that she inquired about the possibility of the surgeon performing a surgical repair to her bladder at the same time that the uterine fibroid was to be removed (hysterectomy).</p> <p>5B/ P2 learned that the vaginal mode of access the surgeon planned to</p>	<p>2/ P3 underwent a surgical procedure on her bladder to bring about a cure in her urinary urgency and incontinence symptoms and normalize her sleep patterns, but it failed to effect any change in this regard. She was disappointed that the surgery did not offer the cure she hoped</p>

	<p>garment (underwear) that she is able to change promptly in the privacy of her home.</p> <p>13/ P1 was not aware of any pattern to her urine leakage and doubted that she would be of help in the study.</p> <p>21/ P1 expressed interest in whether there were any support groups for people who have bladder problems.</p> <p>22/ P1 acknowledged the importance of professional emotional support for individuals who cope with chronic and difficult-to-manage health conditions.</p> <p>23/ P1 agreed that discussing her bladder problems with other people has value to her, and expressed interest in participating in a support group.</p> <p>26/ P1's husband was also upset.</p> <p>28/ P1 confided in a family member about the urine leakage, and was comforted by his warm greeting and assistance. P1 felt self-conscious about the wet clothes that revealed her accidental loss of urine, and was concerned that other houseguests would see</p>	<p>use for the hysterectomy would not provide the extent of access to the abdomen needed to perform a "full bladder lift". As a result, P2's bladder lift was limited to a "mini" version.</p> <p>6/ P2's expectations about the mild relief in urinary symptoms after the "mini bladder lift" were never realized. She was advised (by her doctor) that another surgery was needed to deal with the problem (presumably a "full bladder lift").</p> <p>7/ P2 initiated visits to her medical doctor about the urinary symptoms out of concern that her condition may worsen in later life similar to her mother, who is incontinent and reliant on pads. P2 was motivated to determine whether she needed to have corrective bladder surgery because she perceived there to be benefits associated with having the surgery performed as soon as possible.</p> <p>8-9/ P2 was advised that her urinary abnormalities were not severe enough to warrant surgery, and that she should try medication before considering a surgical procedure. P2, who tried</p>	<p>for. P3 recalled that her doctor's expectations about a cure were more moderate than her own.</p> <p>5/ P3 lives with a constant sense of uncertainty about when the urgency and urine leakage may occur, and she wears a pad to protect against the untoward consequences should it occur.</p> <p>6/ However, P3 is often unable to get to the toilet without wetting herself, even if it is in close proximity, so she wears a pad at all times to contain the urine leakage.</p> <p>13/ P3 stated that she had a bladder "sling" procedure because she anticipated it would relieve her urinary symptoms. P3 believed that the urologist did not share her optimism about the outcome of the procedure.</p> <p>17/ P3 remains interested, but undecided, about undergoing another surgical procedure on her bladder. She has learned that an abdominal, rather than vaginal, entry can be used to create a sling. She plans to consult her surgeon to determine the value of this procedure for her.</p>
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	<p>her.</p> <p>29B/ P1 experienced a painful loss of self-respect, and her family's attempts to provide consolation did not alleviate her distress.</p> <p>30/ P1, whose movement was limited after surgery, was grateful for the physical help from a family member that enabled safe and quick entry into the home.</p> <p>31/ For P1, the physical help by a family member protected her from being seen by others whom she believed would say something to ridicule or humiliate her.</p> <p>32/ Today, P1 is able to take a light-hearted view of her worst moment in time.</p> <p>33/ For P1, the incident of urine leakage was revelatory of how much she is loved by her family.</p> <p>34/ P1 was appreciative of her family's help, which afforded protection from the humiliation she expected to undergo. P1 felt less troubled when her family later laughed about the incident, which provided levity about the incident.</p>	<p>the medication but did not perceive any benefit, increased her efforts to practice pelvic floor exercises, which had also been recommended to her. P2 perceived some relief of her urinary symptoms with the pelvic exercises, and she continues to contemplate having a bladder repair sometime in the future.</p> <p>10/ P2 stated that she perceives less "urgency" compared to years past because her physical activities are not disrupted by urine leakage. P2 does not use pads everyday, but will use them in situations that she predicts leakage may occur (e.g., sports, lifting) as a precaution against wetting herself.</p> <p>13/ P2 encountered several instances when she worked outside her home and experienced a urine leakage that forced her to cease her activity and go in and change clothes.</p> <p>14/ P2 stated that she makes adjustments to her urinary and fluid intake patterns depending upon the environment that she is in (home, work, commuting).</p> <p>16/ On those occasions when P2 is unable to fall</p>	<p>26-27/ P3 wears a pad all the time now because she anticipates that she will leak in these situations. P3's recall of a past time when she did not wear pads draws attention to the progressive worsening of these symptoms over time</p> <p>28-31/ After experiencing this instance of unintentional urine loss, P3 presumes that there is additional urine in her bladder and attempts to urinate in the toilet.</p> <p>33-34/ P3 stated that her doctor suggested urinating more frequently during the day as a means to reduce the frequency of nighttime urination. She implied that doing so would be so irritating that she is unlikely to carry out the doctor's recommendation.</p> <p>35a-37/ Despite P3's restrictions on the volume of fluid she drinks, she has not observed any changes in the frequency of urination, which is very frustrating for her.</p> <p>45-47/ When P3 goes out shopping or in public places, her actions seek to prevent the embarrassment of being</p>
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	<p>35/ P1 is pleased about her close relationship with a family member, who responded to her with his usual warmth and affection after the urine leakage episode.</p> <p>37/ For P1, the receipt of dry clothes from the host (her daughter) enabled her to establish a sense of dignity and mix amongst other guests. The reactions of P1's family were a demonstration of their care and affection for her, and she came to view this incident as an opportunity to realize her good fortune.</p>	<p>asleep immediately after retiring to bed, she will get up to urinate so as to avoid being awakened later.</p> <p>17/ Although P2 had limited fluid intake on days that she commutes, this strategy has not been helpful in alleviating the "urgency", and so it remains a problem for her.</p> <p>20/ In these situations, P2 either responds to her urinary needs autonomously (i.e., she is in charge of the breaks) or she is able to use the toilet without drawing the attention of others, and thus, averting embarrassment. With respect to urination, P2 reports a greater level of comfort in the context of workshops (MU#20) than in the work meetings (MU#19).</p> <p>22-23A/ P2 felt compelled to use a less conventional way to satisfy her imminent need to urinate without being seen by others– on the shoulder of the highway.</p> <p>27-28/ For P2, this was the worst nightmare of her life, however her sense of anonymity in the town provided some relief for her.</p>	<p>detected as "incontinent" by others. First, she learns where the toilets are so that she can rush to use them when urgency happens, and preferably before urine leaks out. In instances when she does not reach the toilet quickly enough and leakage does occur, she wears a pad to contain the leak, and wears dark clothes to ensure that any seepage onto her clothes is concealed. Since P3's urgency refers to her perception of an unintentional flow of urine that she knows she cannot control, her three activities represent a continuum of concealment protecting her identity as a "continent" woman.</p> <p>48/ P3, who was surprised by the amount of the leak, and the failure of the pad to contain all of it, implied that these instances occur rarely for her.</p> <p>50/ P3 seeks out a toilet to urinate, but one is not always available to her. When a toilet is available, she feels reassured when she is able to fully empty her bladder and thus, avoid future leaks. When a toilet is not available, she lives with the uncertainty</p>
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		<p>29B/ P2, who resolved to stay in the race, disguised the urine wetness on her clothing by throwing water on the area. Although P2's actions offered partial relief of her discomfort by concealing her indiscretion from others, they were not sufficient to restore her sense of self-respect.</p> <p>31A-31B/ Before the race, P2 had made several trips to the toilet out of concern for the extent of bladder fullness because of how much fluid she had ingested. Before the race, P2 was relieved when she voided small amounts of urine because it suggested to her that her bladder was effectively "empty".</p> <p>32/ P2 sense of anonymity in the city where it happened seemed to alleviate any threats to her sense of dignity (esteem), but she was aware that the impact would have been more detrimental if she had been in her own hometown.</p> <p>33B/ P2 perceived that the pelvic floor strengthening exercises had given her a greater ability to regulate urination, but that</p>	<p>that future leakage might occur. P3 wears the pad to manage her uncertainty about whether any urine will leak out.</p> <p>51-52/ Given the extent of wetness on P3's clothes, the only option was to leave the casino. P3 threw out the pad, which was completely saturated with urine, and did not have a replacement. She placed some paper in the crotch of her underwear as a temporary pad until she arrived home.</p> <p>53-54/ P3 only occasionally carries extra pads with her, depending on where she is going, because she does not believe that she will encounter large leaks. P3 limits her activities to places where she knows where the washrooms are so that she can respond to the feeling of urgency by toileting promptly. P3 implied that she is willing to restrict her freedom of activity so that she can be confident about using the toilet when urgency appears, rather than to venture out into novel area, which would require reliance on pads.</p> <p>56/ P3 affirmed that she wears TENA pads.</p>
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		<p>leakage was likely to be a problem if she drank a similar amount of water before running.</p> <p>34/ In reply to I., P2 acknowledges that the urine leakage was quite distressing and embarrassing when it happened, and because of her commitment to continue running, she felt motivated to see a healthcare provider to take care of the problem.</p> <p>35/ P2 was referred to an urologist by her gynecologist, whom she informed about the urine leakage problem and her desire to figure it out. P2 acknowledged that she did not reveal the details of the urine leak at the running race to her gynecologist. P2 implied that her feelings of embarrassment about the urine leakage prevented her from disclosing the incident to her doctor.</p> <p>36/ P2 stated that she regularly experienced urine leakage when she played baseball over a period of six years. The leakage became a problem for P2 only when she forgot to wear pads because certain body movements could cause embarrassing leaks. During the game, P2 averted</p>	<p>58-59/ P3 uses physical maneuvers, such as pressing on her lower abdomen/pubic area, to ensure her bladder is fully evacuated. Previously, P3 has retired to bed after voiding, only to immediately perceive another need to urinate that required a second trip to the bathroom, which she finds stressful. P3 uses the maneuver to avoid the second trip to the toilet by ensuring her bladder is empty the first time around.</p> <p>60/ P3 felt supported by her friend, who seemed accepting of need to end the visit to the casino prematurely. P3 had told her friend about the urinary problems she had, and believed her friend's empathic response followed from her own experiences with medical problems.</p> <p>62/P3 remains hopeful that her surgeon will be able to do something to alleviate her urinary problem and has been trying to set up an appointment at the clinic to discuss it.</p> <p>63-64/ P3 stated that the urinary symptoms are not as troublesome during the day, and she has been able to manage by</p>
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		<p>embarrassment by restraining body movements that she anticipated would bring about leakage, but her actions compromised her sense of effectiveness in the sport (baseball).</p> <p>37/ P2 is aware that leaking urine in front of others injured her sense of self-respect. She saw humor in the absurdity of what happened to her, and sharing the humor with close others brings P2 some relief about a situation that she felt powerless to change.</p> <p>38/ For P2, learning the locations of available toilets along her route of travel has been a vital strategy to avoid experiencing a “urinary urgency”, but she feels that her freedom is limited due to restricting travel to routes where she has knowledge of toilet locations.</p> <p>41/ P2 omitted the genuine reason for her lateness, that is, her need to urinate, which enabled her to maintain a sense of competence in relation to her colleagues.</p> <p>43-44/ P2 stated that in order for her to feel effective in work meetings, she restricts her fluid consumption to</p>	<p>wearing pads.</p>
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		<p>avoid needing to take breaks to use the toilet, even when her own thirst is compelling. P2 acknowledged feeling envious of younger women whom she presumes do not experience the urinary problems she has (frequency, urgency) and whom she views as “free” to consume fluids <i>ad libitum</i> in this context.</p> <p>45/ When P2 is driving with a companion, however, she presumes that her urinary needs will annoy others, and so she restricts fluid intake to suppress them.</p>	
<p>Idiographic Health and Environmental Circumstances</p>	<p>4/ For P1, the embedded material that strengthens her abdominal wall is also a source of unremitting pain. P1 feels unable to effect any improvement in her pain.</p> <p>5/ P1’s non-urinary health problems required a lengthy and sedentary recuperation, which she believes contributed to an increase in body weight. P1 disapproves of her present body weight/shape.</p> <p>26/ P1 was a passenger in a car <i>en route</i> to a family member’s home for a seasonal celebration when she became aware</p>	<p>18/ For P2, the most disturbing aspect of the “urinary urgency” occurs when she arrives at the workplace. When P2 is delayed by traffic conditions, she feels stressed about arriving at her work commitment on time. She is delayed further when she is unable to locate a toilet and has to ask someone for help.</p> <p>21/ P2 stated that at the end of her workday, she often worries about traffic conditions along her homebound route. P2 anticipates that if her commute is delayed, she may experience a</p>	<p>14-16/ P3 had to begin standing so that she could urinate (before she would sit on the toilet), which is very unpleasant for her because the urine spray goes “all over” the toilet and floor. Occasionally, she encounters a toilet that, because of its physical dimensions, enables her to void without as much of the spray that is so unpleasant.</p> <p>38-39/ P3’s current experience with a painful back/leg condition further complicates her already-difficult process of urinating from a standing position.</p>

	<p>of the need to urinate. P1's sense of uncertainty, panic and powerlessness heightened alongside her awareness of the obstacles preventing an accelerated arrival at her destination. P1's husband was also upset.</p> <p>27A/ For P1, the feeling of the urge to urinate is problematic when she is not in close proximity to a bathroom, and especially when she is in a moving vehicle.</p> <p>30/ P1, whose movement was limited after surgery, was grateful for the physical help from a family member that enabled safe and quick entry into the home.</p>	<p>desperate urge to urinate ("urinary urgency").</p> <p>22-23A/ P2 stated that she encountered "urinary urgency", as well as emotional distress, after being delayed while commuting. The "urinary urgency" arose when P2, who had a desperate need to urinate, encountered (environmental) obstacles that interfered with locating a toilet.</p> <p>23B/ P2 stated that she becomes quite distressed and embarrassed when she needs to go to the toilet and other people don't have to, but even more distressed when traveling in a car and feeling ineffective when she is unable to locate a bathroom.</p> <p>40/ In response to I.'s query, P2 stated that she develops a desperate need to void ("urinary urgency") when the time it normally takes her to commute to work is extended by one or more unpredictable events (volume of traffic, accidents, etc) <i>en route</i>. In these situations, P2 feels conflicted because she is left with very little time to get to the office promptly, and yet she also needs to satisfy her immediate urinary needs.</p>	
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## V. Elaboration on the Relation between the Eidetic Findings and Individual Experiences of the Participants

In this section, a description of how each of the participants (P1, P2 and P3) lived through each constituent in the psychological structure is presented, along with excerpts from the interviews to illustrate the relationship between general (eidetic) findings and each individual's experience. References to the interview data (meaning units or MUs) are provided in parentheses.

### *i. Situational Awareness of the Inefficacy to Contain Urine*

All of the female participants described the onset of urinary urgency as a *situational awareness of the inefficacy to contain urine*. There were two variations in the temporality of this awareness (i.e., when it appeared), which unfolded either before urination began (the "*pre-flow*" variation) or as urine began to flow (the "*flow*" variation), and each is described separately below.

Both P1 and P2 described episodes of urgency when their awareness of the inefficacy to contain urine announced itself before urination began (pre-flow). P1's awareness announced itself while she was a passenger in a moving vehicle, which she described this way,

“It was Christmas ... and I knew I wasn’t going to make it to my daughter’s home, my husband didn’t know what to do...” (#26)

P2’s awareness unfolded in situations where she felt compelled to contain more urine in the bladder than she felt capable of, such as while commuting in her car to and from work, as well as during meetings in the workplace. P2 described one of her commutes to work this way,

“I know it’s going to take me an hour, hour and half, the weather who knows, to get from where I’m at to downtown [CITY] wherever I’m going, which is always like usually an hour, two hours, three hours or whatever. And that’s really when it’s been a problem because ... if I get on the road at like 7:30 or 8 o’clock and you know it’s an hour and a half, two hours before I get in to [CITY], I am dying by the time I get there.” (#17)

P2 acknowledged that her typical frequency of urination occurred about every one or one and a half hours while in her home (#15), and intimated that commuting posed a strain because they required her to contain the urine for longer periods of time. In work settings, P2 felt compelled to contain more urine in the bladder than she felt capable of because she wanted to remain present in meetings to perform professional tasks alongside her co-workers. She stated,

“But I’d say for several years there, I’d go in to a meeting, I would pee right before I go in to a meeting, and meetings generally are a least an hour, hour and a half before anybody feels the need to get up and go do anything and I would be just dying after forty-five minutes...” (#19)

Both P1 and P2 were continent at the time they encountered the pre-flow awareness of the inefficacy to contain urine. P1 reported that she was continent during the commute to her daughter's home, but urination began as she exited the vehicle on the driveway at the destination. P2 remained continent as well, but she did acknowledge that she had, at times, used less than conventional ways to empty her bladder. For example, P2 described one instance in which she chose to urinate on the shoulder of the highway after being delayed in traffic over three hours during a snowstorm (#23A).

With respect to the flow variation of this constituent, both P2 and P3 described episodes of urinary urgency where their awareness of the inefficacy to contain urine announced itself with the appearance of urine flow. For example, P2's awareness began when urine flowed onto her clothing as she engaged in physical activities, such as running in a marathon (#26) or baseball game (#36). P2 described how the situation unfolded as the marathon race began,

“We're all lined up there and I started running, trotting, you know running, and it started leaking out and just, I mean, pouring out. Like I'd never experienced anything like that ever. And it just, I could feel it and I thought, 'Oh no, oh no, oh no' and we're at the beginning of the race and there are cars all around and there are people cheering and the streets are lined with people and they're all watching us and I've got this cute, little short outfit on and the whole thing, and I can feel it just flooding, just flooding down my pant, I can feel it coming down my leg, I can feel it, just like flooding.”  
(#26-#27)



Similarly, P3's awareness arose when she perceived the beginning of a urine flow after standing up from a seated position (#26, #49, #50), as well as during the night (#34). She described one of the instances this way,

“when I'm sitting and watching television, or just sitting or whatever doing something ... and I get up and I flow, like maybe, just a second or two seconds..” (#26)

P3 also described urgency as an immediate awareness of her inefficacy to hold onto urine because urine had already begun to flow. She stated,

“when I have to go, I have to go right now. [I.: So as soon as you have the sensation it's almost already too late?] P3: too late, yes.” (#19).

In some instances, participants encountered small volumes of urine leakage (P3: #26), whereas in others, they encountered a large flow (P2: #30; P3: #57). P2 described a large flow in this way,

“And it just kept coming; it was almost like when it started there was just no stopping it. It was a very interesting thing, 'cause that had never happened, you know, to me, and there was just no stopping it, period... It was flowing as I was running, not dribbling or drabbling, flowing as I was running and it just continued to until it was, I guess, all out...” (#30).

Common to the pre-flow and flow variations of this constituent was the *pressure and uncertainty* that ensued once *awareness of the inefficacy to contain urine* appeared.

We turn to these experiences in the next constituent.

### *iii. Pressure and Uncertainty*

The second constituent of the psychological structure of urinary urgency, *pressure and uncertainty*, refers to the sense of pressure to get to a toilet as quickly as possible, as well a sense of uncertainty about being able to reach it, following the onset of an *awareness of inefficacy to contain urine*. This sense of pressure refers to a compelling drive to perform a certain action, rather than a perception of sensory stimuli (e.g., like a physical or abdominal pressure). Each of the participants' experiences is elaborated separately below.

For P3, the pressure to reach a toilet was considerable because her awareness of the inefficacy to contain urine announced itself as a sudden appearance of urine flow. She described her sense of pressure this way, "when I have to go, I have to go right now..." (#19). P3 experienced a sense of pressure to reach a toilet during episodes that unfolded in public places, where she was at risk of being seen as incontinent by others, as well as during instances that unfolded in her own home, where others were not present. In addition, the sense of pressure emerged rapidly once the awareness of the inefficacy to contain urine announced itself, and P3 did not have any knowledge of how much urine flow she would encounter. As a result, instances of urgency were always associated with a sense of uncertainty about reaching a toilet (#6, #12, #19, #26, #27, #48, #50). Pad use provided some relief of P3's pressure and uncertainty to reach a toilet,

“I wear pads now because I never know. Sometimes I get up and I have to go so badly that I didn’t get to the washroom. I don’t have time to get to the washroom, so I wear a pad all the time now... (#5-6)

However, pad use did not completely alleviate the pressure and uncertainty about reaching a toilet because P3 occasionally encountered continuous urine flow, which threatened to overflow the pad and manifest in a demonstrable leak. For example, on one occasion, P3 began leaking urine while playing at a machine in a casino and by the time she reached the washroom, the pad had overflowed and urine had seeped onto her clothes (#51).

Like P3, P2 experienced considerable pressure to reach a toilet after she encountered an unexpected flow of urine during an urgency episode. For example, on one occasion, P2 began to leak urine as she ran in a marathon, and felt pressed to reach a toilet quickly,

“I thought ‘Oh my God, oh my God, what am I going to do!’ And I had no choice, by the time I realized the seriousness of what was happening, we were on a bridge going from one section to another ... there’s no bathroom in sight anyway, because we started in the middle of a park and we were running over a bridge, so it’s not like I could have said, ‘Oh here, I’ll just go to the bathroom’...” (#28)

Moreover, her location along the race route limited availability of toilets and left P2 uncertain about being able to reach one. As noted in the first constituent, P2’s episodes of urgency did not always involve an unexpected flow of urine; she also

experienced urgency in situations where she felt compelled to contain more urine in the bladder than she felt capable of doing (e.g., while commuting in her car to and from work, during work meetings). In these instances, P2 also reported feeling pressed and uncertain about getting to a toilet. For example, in one instance, P2 traveled by car in heavy traffic and inclement weather, and experienced physical discomfort due to a full bladder. She felt pressed to find a toilet (#23A) and due to the slow-moving traffic and limited bathroom availability on the highway, she was uncertain about being able to reach a toilet (#22). P2 also experienced urgency while commuting to work in less inclement weather conditions, and she felt a sense of pressure and uncertainty about reaching her destination in sufficient time so that she could use a toilet before any of the professional activities began (#18, #40). The emotional valence of these situations was increased when P2 encountered heavy traffic conditions because they interfered with her efforts for a timely arrival at her destination, as described in the *Idiographic Health and Environmental Circumstances* constituent. In professional meetings where P2 refused to excuse herself to use the toilet and contained more urine in the bladder than she felt capable, a sense of pressure and uncertainty about toilet use followed from her lack of knowledge about when a break in the meeting might ensue, and her unwillingness to assert her need for a break.

Lastly, P1 also felt a sense of pressure to reach a toilet when her awareness of the inefficacy to contain urine announced itself while commuting in a vehicle (#26).

She stated,

“my problems always start in the car, like the urges. Of course, at home, I’m in an apartment so, how far am I from the bathroom, eh? ...” (MU #27A)

She, too, indicated a sense of uncertainty about being able to reach the toilet at her destination without starting to urinate (#26). P1’s sense of pressure and uncertainty about reaching a toilet was further heightened by the heavy traffic that interfered with her efforts to accelerate her arrival, as described in the constituent, *Idiographic Health and Environmental Circumstances*.

#### *iv. Disclosure of Urinary Flow*

When episodes of urgency emerged in public, social and/or professional settings, participants encountered *disclosure of urinary flow*. This constituent refers to the various embodied ways in which the participant’s urinary flow was announced to other persons. Since some of the urgency episodes were associated with urine leakage, while others were not, there were three variations in how this constituent was lived through by the participants. Each of these variations is elaborated separately below.

In the first variation, all three women reported experiencing situations in which their bodies had expelled urine and the urinary flow became evident to others through a public display of wetness on their clothing (disclosure via wetness). In these instances, participants had no sense of control over the physical emergence of the urine flow. P3 was playing at a slot machine in a casino when she suddenly began urinating. Despite her haste to pack up her belongings and get to a toilet quickly, the urine soaked through the pad and onto her clothing, thus revealing her urination to others at the venue (#48). Similarly, P1's urine flow was revealed to family members as she emerged out of a car just outside her daughter's home. For P2, the flow of urine was revealed to teammates and/or spectators when she leaked while running during a baseball game (#36) and in a marathon (#27-#28).

In the second variation of this constituent, one of the participants (P2) reported experiencing situations in which she felt compelled to make verbal statements about her need to urinate that rendered them evident to professional colleagues (verbal disclosure). Although P2 had retained control over the physical emergence of urination, her announcements about urinary flow were required in order for her to be able to satisfy them. For example, P2 described situations in which she revealed her urinary flow to others when excusing herself from meetings to use the lavatory (#19, #39B, #42), or when asking staff in professional settings for assistance locating the bathroom (#18). She described the latter situation this way,

“Like I really, that’s when it’s the most disturbing for me...You get there and of course you’re in this, you know...you’re going to an office building and there’s no bathroom...you’ve got to go and ask, ‘Oh sorry can I...?’” (#18)

In the third variation, one of the participants (P2) reported experiencing a situation in which she felt compelled to urinate in a public place, which also rendered her urinary needs evident to others (behavioral disclosure). Although P2 had retained control over the physical emergence of urination, she felt pressed to relieve her urinary needs on the shoulder of a busy highway (#23A). As such, the lived situation involved an announcement of P2’s urinary flow to other persons on the highway who bore witness to her urinary-related behaviors.

A feature shared by all variations of this constituent was that participants felt vulnerable about the announcement of their urinary flow to other persons, which served as the basis for the other affective states experienced by the women and described in the sections that follow, including feelings of *emotional distress*, *embarrassment* and *sense of inadequacy*.

v. *Embarrassment*

All three women described feelings of *embarrassment* related to the *disclosure of urinary flow* while in public, social and/or professional settings. As noted in the previous section, *disclosure of urinary flow* refers to situations in which the

participant's urinary flow was announced to other persons, either due to an expulsion of urine from the body onto clothing (disclosure via wetness), due to a participant's verbal statements about a need to urinate (verbal disclosure), or urinating in a public location (behavioral disclosure). A common sentiment was the participants' concern about being seen by others. In this section, the manner in which each participant lived through the feeling of embarrassment following disclosure of urinary flow is elaborated separately.

P1 felt embarrassed when her wet clothes revealed the urine leakage to family members (#29A - #29B). In addition, P1 was concerned about being seen by guests attending her daughter's party after her leakage episode. She stated,

“...’cause the place, the place was full of teenage boys, and here I am wet, ’cause it was one large volume of pee [*laughs*]  
[I.: Oh. So the entire, because the tape won't be able to see.]  
P1: That was very embarrassing.” (#28)

P1 implied that it was very difficult for her to be seen by the adult guests, however she would have been even more embarrassed, possibly mortified, had the teenage boys seen her. She believed that the teenage boys would have been even more vocal in their critical and harsh treatment of her. She stated,

“which, you know, how eighteen, nineteen-year-olds are. I just thought, I can't go in there with all those kids..” (#31)

Like P1, P3 felt embarrassed about the wetness on her clothing following the failure of the pad she was wearing to contain the urine leakage and was concerned that other patrons in the venue would view the wetness on her clothing (#51-#52).



She left the venue out of concern that other casino patrons would see her in this condition (#51-#52).

Lastly, P2 described feelings of embarrassment when she encountered the announcement of urinary flow to others in all three of its variations. For example, P2 felt embarrassed by the visible leakage on her clothes (disclosure via wetness) that occurred in front of her teammates and other spectators while playing baseball on nights that she forgot to bring a pad (#36), as well as while running in a marathon (#27-28 #32, #34). She described her embarrassment about the leakage in the marathon this way,

“I can feel it [urine], just like flooding. It was just the worst, if it wasn’t just so crazy, it would be just like this biggest nightmare of my life. ... Just flooded all down my legs, all down the back of my shorts, like I was just, it was as if somebody had squirted me. It was horrible. I just thought nothing worse could happen in the world.” (#27 - #28)

P2’s concern about being seen by race spectators after the urine leakage led her to abort her plan to use a toilet at a gas station along the marathon route (#29A). She stated,

“I could see that there was a gas station up ahead and, ... once we got in to that place, there was people standing all around. And there’s like, ‘Yeah!’ And I thought, ‘Well I can’t stop’...” (#29A - #29B).

In addition, P2 reported embarrassment about making verbal disclosures of the need to urinate to colleagues in a professional setting (verbal disclosure). For example, P2 was embarrassed when she had to explain her need to leave meetings to use the

lavatory (#19, #41), or when she asked staff for assistance locating the bathroom (#18). The intensity of P2's embarrassment was influenced by context. When P2 worked alongside other female professionals of similar age, her level of embarrassment was more moderate than if she worked in settings dominated by males. She perceived that her urinary needs would attract more attention in male-dominated professional settings (#42). Lastly, P2 experienced embarrassment following an instance in which she urinated in a public setting (behavioral disclosure). P2 was concerned about being seen by others while in the act of urinating at the roadside, but she attempted to position herself adjacent to the car so that no one would see her (#23A). She stated,

“So I actually pulled off to the side of the shoulder. I got out of my car, walked around the front of the car, opened up the passenger side door and squatted in front of the passenger side door, ‘cause I figured, okay, the people behind won’t be able to see, they’ll just see the door and the people on the other side there was too much of a storm anyway and just squatted and went to the bathroom...” (#23A)

Participants responded to their embarrassment with a wide range of behaviors, which are elaborated later in this section, under the constituent, *material, psychological, relational and medical strategies*.

vii. *Emotional Distress*

All three participants described experiencing *emotional distress* related to the *disclosure of urinary flow* while in public, social and/or professional settings. As noted in a previous section, *disclosure of urinary flow* refers to situations in which the participant's urinary flow was announced to other persons, either due to the body's expulsion of urine (disclosure via wetness), a participant's own verbal disclosure (verbal disclosure), or urinating in a public location (behavioral disclosure).

Emotional distress refers to the sense of emotional pain, sorrow and/or anxiety faced by participants in relation to leaking urine in a public place. In this section, the manner in which each participant lived through the emotional distress following disclosure of urinary flow is elaborated separately.

P1's anguish became evident when she began urinating on her clothes while getting out of a car at her daughter's home (#27B) and she started to cry. She stated,

“And I get out of the car, I started to cry ‘cause I said, I can't hold it. ... I had my jeans on, and I peed right through them, everything, my shoes, everything....” (#27B)

P3 experienced emotional distress when she began urinating while playing at a casino machine, and the pad she was wearing failed to contain the urine that came out unexpectedly (#48, #55). Her sense of anxiety emerged when she had to pack up

personal belongings which hindered her ability to leave the machine immediately, and her inability to stop the urination once it began (#48).

Lastly, P2 described feelings of emotional distress across several instances of urgency in which she encountered the announcement of urinary flow to others in all three of its variations. For example, P2 felt distress when she leaked urine onto her clothing while running in a marathon and could not conceal the indiscretion from spectators (#27) (disclosure via wetness). She stated, “at the moment, of course, it was really distressing...” (#34). Her sense of distress emerged in relation to her location on the course (and away from toilets) that rendered it difficult for her to manage the unexpected urination as she wanted to. She also experienced emotional distress following an event in which her sense of urgency compelled her to urinate in a public setting (behavioral disclosure). In this situation, P2 encountered difficulties finding a bathroom off the highway during a snowstorm, and her sense of distress emerged due to her inability to bring about a conventional way to urinate (i.e., in a toilet) (#23A). Lastly, P2 reported emotional distress about making verbal disclosures of the need to urinate to colleagues in a professional setting, because they drew attention to her urinary needs (#19, #23B) (verbal disclosure). In contrast, when P2 worked at home (#15) or in professional situations where she was able to satisfy her urinary needs without drawing the attention of colleagues (e.g., workshops, #20), she did not experience emotional distress.

Participants responded to their feelings of emotional distress with a wide range of behaviors, which are elaborated later in this section under the constituent *material, psychological, relational and medical strategies*.

*viii. Sense of Inadequacy*

All three participants, P1, P2 and P3, described a *sense of inadequacy* after the disclosure of urinary flow while in public, social and/or professional settings. The constituent had three variations in terms of how it was lived through by the participants. The first variation, which was described by two participants (P1 and P2), involved a sense of inadequacy associated with urination in public settings. For P1, urination outside of her daughter's home seemed to arise from a personal failure on her part, which caused intense emotional pain that could not be eased by her family's support. She stated,

“Oh it was embarrassing. It was degrading, humiliating, and everybody, my daughter, my husband, son-in-law saying, ‘you know mom, don’t worry about it, it happens to everybody’. No, it happened to me, and that’s what you worry about. I don’t care about everybody else. They haven’t got wet pants on Christmas Eve. I was feeling sorry for myself in a big way. It happened to me, you know...” (#29B)

Likewise, P2's experience of urine leakage while running in a marathon was also associated with a sense of personal inadequacy. Despite her ability to finish the race

and in fact, achieve first place within her age category, the leakage of urine revealed a personal failing. She stated,

“So I thought well, this is crazy, you know. This never happens to me at home. So, I guess, in terms of emotions I was surprised, ‘Hey this never happens to me at home’ and just ticked off. Like, jeesh. You know, ‘can’t even run’...”

While P2’s efforts to conceal the leak eased her emotional distress about the social indiscretion, her reflections about the leakage revealed a negative and lingering impact on her sense of capability (#29B). That is, her inefficacy to contain urine was equated with her inefficacy to run.

The second variation of this constituent had subtle differences from the first, and was lived through by only one participant (P3). P3’s feelings of injury followed from her sense of failure in adequately concealing the leak from others using typical methods (e.g., pads, dark clothes; #45-#47). P3 felt that social exclusion was her only recourse to maintain her sense of self-respect; she stated, “So I left, because what else can you do? There’s nothing that you can do...” (#52).

The third variation of this constituent, which was described by one of the participants (P2), involved a sense of inadequacy associated with the loss of regulation over urination. In one instance, P2 felt compelled to urinate in a public space due to intense physical discomfort, but she perceived this behavior as undignified and distasteful (#23A). At other times, P2 felt inadequate because the frequency with which she had to interrupt her work to use the toilet compromised her

sense of efficacy as a professional (#39B, #43). She acknowledged that her level of engagement in meetings was negatively impacted by the continuous mental and physical attention that she had to give to her urinary needs. She stated,

“You know, so again, you’re in the meeting, things are getting very important, important stuff is being talked about, you need to be listening, and all I can think about is going to the bathroom. You know, so it creates distraction in that sense...” (#39C)

Thus, P2 felt as if her own values and activities were compromised by episodes of urgency, and she internalized these instances as a personal inability or shortcoming.

The participants responded to their feelings of inadequacy with a wide range of behaviors, which are elaborated later in this section under the constituent, *material, psychological, relational and medical strategies*.

*ix. Material, Psychological, Relational and Medical Strategies*

All of the participants described the use of *material, psychological, relational and medical strategies* to alleviate and/or avoid the negative emotional consequences (e.g., emotional distress, embarrassment, and sense of inadequacy) associated with the disclosure of urinary flow. Each of the four strategies within this constituent is elaborated below.

### *Material Strategies*

Material strategies were used to reduce or avoid the negative emotional consequences associated with urine leakage by maintaining an outward appearance of normalcy after a urinary leak had occurred. There was a temporal dimension to this aspect of the constituent in that the material strategies were employed either in advance of a leak (i.e., as preventative measures), or in the moments just after a leak had occurred (i.e., as compensatory measures).

With respect to preventative measures, P3 described how she chose to wear dark clothing (e.g., pants) when she went into public places because it was a color that would discretely conceal wetness if a leak occurred. She stated,

“this is why I wear black all the time because I’m always afraid, because black won’t show and black, you know, black skirt or black pants or black something...”  
(#47)

Other strategies, such as commercial pad use, were also described. Pads were helpful because the urine leakage could be contained privately (i.e., beneath clothing), and thus avert the embarrassment associated with the public disclosure of a leak. For example, P2 regularly wore pads in situations where she predicted leakage might occur, including strenuous activities and sports (#10, #36). She stated,

“if I know I’m going to go out and play sports, you know, if I’m going to go golfing or I’m going to work hard... Like we just moved and so there was a lot of boxes, and up and down stairs and all that. I wore pads on those days, just so in case I was straining or



whatever... if I know I'm going to be in that situation,  
then I will..." (#10)

Pads also alleviated the sense of pressure and uncertainty about reaching a toilet once urine began to flow (P3: #5, #6). For example, P3 used pads to contain the urine that flowed after she rose from a seated position (#26, #27, #45, #56). There were occasional difficulties when using pads, however. P2 reported irritation and yeast infections associated with daily pad use (#3). P3 encountered pad failure during one episode of urgency, which led to her clothes becoming wet in a public venue (#48). In addition, both P2 and P3 encountered instances in which they needed a pad, but did not have one (P2: #36; P3: #53, #54, #55). On one occasion when P3 did not have a pad, she constructed a temporary one using washroom paper (#51, #52).

With respect to compensatory post-leak measures, participants' efforts were directed toward the use or modification of clothing in ways that concealed the appearance of wetness after a leak had occurred. For example, P1 was provided dry clothes to wear while visiting a family member's home after her episode of urgency and leakage. She stated,

"my daughter, she got me all dry clothes and she just came to the rescue as she always does. It's just a wonderful feeling to be cared for that much..." (#37)

The dry clothing enabled P1 to avert the embarrassment of being seen as incontinent by others guests in the home, and to assuage the sense of inadequacy because she was able to participate in the party and mix freely with other guests (#37). Also, P2, who

encountered urine leakage while running in a marathon, poured water on her clothes to disguise her indiscretion (#29B). Given that the marathon took place in the heat of summer, P2's use of water in this way likely was congruent with the behavior of other runners, who typically cover themselves in water to manage body temperature.

### *Psychological Strategies*

Psychological strategies were also employed by participants to protect themselves from the negative emotional consequences associated with the disclosure of urinary flow. Both P2 and P3 sought to increase their physical distance from others to ensure privacy while urinating at the shoulder of the highway during an episode of urgency (P2: #23A) or after wetness appeared on clothing at a public venue (P3: #52). Concealment was a second type of psychological strategy. For example, P2 avoided the distress and embarrassment associated with the disclosure of her urinary problem in professional settings by concealing the genuine reason for her late arrival at events (i.e., her need to urinate, #41), or by urinating at times when she perceived that others would not observe her (#20). For example, she stated,

“I've actually called ahead a few times, you know, probably three or four and said, 'I'm on my way, I'm running a little bit late, I should be there in about ten or fifteen', to buy me time to stop and go to the bathroom. So it's the truth I am running late, late because I have to pee all the time...” (#41)

In another instance, P2 made use of the car doors and her body position to conceal herself as she urinated on a highway shoulder, and found solace in her belief that other drivers did not observe her (#22-#23A). P2 also noted that she relied upon her sense of anonymity in the town where she leaked urine while running in a marathon (#28). She stated,

“It was just horrible ... Fortunately, had that been my own hometown, I don’t know what I’d have done, but I didn’t know a soul...” (MU# 32)

Thus, for P2, anonymity served as a form of psychological disguise that eased her sense of embarrassment about the indiscretion. Lastly, participants described various behaviors that they performed to reassure themselves that further urination and/or leakage would not occur. For example, P3 urinated immediately after experiencing urine leakage to ensure her bladder was empty (#26, #50). P2 urinated multiple times prior to the start of a marathon due to her concern that urgency and leakage might ensue after drinking several bottles of water (#31A-31B). She stated,

“you know, I was guzzling this water you know, and ... I thought, ‘Okay I better go to the bathroom, I better make sure’. So, I went to the bathroom like three times before we got ready... So, I’d go to the bathroom, there wouldn’t be much there and I’d think, ‘Okay no, I’m good, I’m good’...” (#31B)

P3 used physical maneuvers, such as pressing on her lower abdomen/pubic area, to ensure full evacuation of her bladder (#58, #59). In addition, P2 manipulated the movement of her body during baseball games when she forgot to wear a pad to ensure

that she avoided leaking urine (#36). Another assurance behavior involved limiting travel to places where the locations of washrooms were well known to the participant. For example, both P2 and P3 reported limiting travel in places where they knew the locations of washrooms (P2: #38, P3: #45) so as to ensure toilet availability when urgency appeared. Lastly, both P2 and P3 sought reassurance of urine containment by limiting the amount of fluids they consumed. P2 reduced her intake to avoid taking bathroom breaks while in professional meetings, while commuting to work and while commuting with her companion (#14, #43-45). Both P2 and P3 reported that this strategy was not effective in alleviating the problem of urgency, however (P2: #17, P3: #37).

The psychological strategies employed by participants were not limited to avoiding conditions which were predicted to increase the risk of a leakage episode. For example, one participant, P1, transformed the negative emotional consequences following from the disclosure of urinary flow into an opportunity to appreciate the blessings of familial love and affection (#33, #37). She stated,

“they could have been embarrassed, you know, because there was, there were guests there aside from the teenagers. Yeah I just, it was very nice the way it was handled and kind of lightly joked about... So I am blessed...” (#34).

Thus, P1’s feelings of gratitude about her family’s protection (#34), as well as their shared humor about the event sometime later (#32, #34), enabled P1 to recover a

sense of ease about the episode that had caused embarrassment and a sense of inadequacy.

### *Relational Strategies*

All of the participants described the presence of supportive responses from friends and family that helped to moderate the embarrassment and distress they felt after leaking urine in public settings. For example, P1 received encouragement from her husband during the pressured trip to reach a toilet once the episode of urgency began (#26), as well as emotional support from family members after she urinated into her clothes (#29B). Her son-in-law's warmth and support were particularly reassuring to her (#35). Both P1 and P2 reported that they shared laughter about the leakage episode with close others (P1: #32, P2: #37), which eased some of the emotional distress that they felt about the incident. P2 stated,

“like I said... I was mortified at the moment and, but thought, you know what, this going to make a great story. *[laughs]* ... Telling the people that I'm willing to share it with, like my sister and stuff, it is a great story. You know, it just shows you how ridiculous things can get sometimes...” (MU #37)

For P3, the agreement of her friend to leave the casino earlier than planned was viewed as an act of support, because she was able to alleviate further distress and embarrassment associated with remaining at the public venue with wet pants (#60). One participant, P1, expressed interest in attending support groups that would assist

with the emotional challenges of chronic health conditions, including her bladder problems (#21 - #23).

### *Medical Strategies*

Medical strategies, including assessment/consultation and treatment, were oriented towards the reduction and/or elimination of the urinary urgency and incontinence symptoms in the lives of participants. For P1, the process of medical assessment validated the identity of the leakage in her underwear as urine (#7), but did not increase her understanding of the patterns or causes of her urgency and urine leakage symptoms (#13). The other two participants (P2 and P3) elaborated upon their experiences with treatment. Both P2 and P3 described having positive expectations about a vaginal sling procedure, although neither realized any changes in their symptoms post-operatively (P2: #5A; P3: #2, #13). For example, P3 stated,

“I had the operation, hopefully thinking that it would cure what I had. And she was, the doctor, was not just too sure whether it would or not, but she said to try it. And it didn’t, it didn’t help...” (#2)

In fact, P3 suffered negative changes to her health status after the surgery, including a bladder injury and the need to urinate from a standing position (#14-#16). Both P2 and P3 were contemplative about undergoing a more invasive abdominal sling procedure (P2: #8-#9; P3: #17) in the hope that it would alleviate the problem (P2: #62; P3: #9). At the time of the interview, P3 was in the process of arranging a

surgical consultation, whereas P2 had been informed that she was not a candidate for surgery (#8-9). P2 tried medication and pelvic floor strengthening exercises instead (#8-#9). Although P2 reported no benefit from medication use, she did perceive benefit from the pelvic floor strengthening exercises (Kegels) in terms of regulating urination (#9-#10, #19). Specifically, she noted a reduction in the frequency with which she had to excuse herself from professional meetings to urinate, and consequently, less embarrassment associated with disclosing her urinary needs to colleagues (#19). The medical strategies did not restore P2's confidence about being able to contain urine while running, however (#33B).

*x. Idiographic Health and Environmental Conditions*

All three participants described *health and/or environmental circumstances* that impeded access to a toilet, and intensified the emotional valence of the situation. With respect to environmental circumstances, both P1 and P2 described situations in which immediate access to a toilet was not possible because they were in a moving vehicle when the awareness of their inefficacy to contain the urine announced itself, and they encountered conditions that impeded their access to a toilet. In P1's situation, her husband's acceleration of their vehicular travel was somewhat limited by the volume of traffic on the highway, which increased P1's sense of pressure and uncertainty about reaching a toilet (#26). P2, who commuted by car between cities to

attend professional meetings, reported traffic delays due to weather conditions (e.g., snowstorms), as well as traffic accidents, which interfered with her ability to leave the highway and access a toilet (#17, #21, #22, #40). In one situation, P2 was on the highway for over three hours in a snowstorm, and described it this way,

“I had been on the road forever, and was just dying, you know, just thought, ‘okay, this is ridiculous’, we’re going like five miles an hour, snow blowing everywhere, you know, couldn’t see the car in front of you and all that, and I’m just dying, having to go, and exits are too far in between, you know you couldn’t even get off, and I thought, ‘Well I don’t know what I’m going do. This is crazy.’...” (#22)

She continued,

“So, that is real distressing, is to be in traffic and it’s, you know, it can be embarrassing when you have to go to the bathroom when nobody else has to, but if you cannot get to the bathroom that’s really distressing.” (#23)

Moreover, in other situations, P2 encountered slow-moving traffic (i.e., gridlock) while commuting to professional meetings, which impeded her ability to arrive at her destination with sufficient time to use the toilet before the event began. The sense of pressure and distress was greater for P2 in these situations because she sought to void prior to meetings as part of her strategy to conceal her urinary needs in professional settings, and to reduce the embarrassment she felt when she did disclose them.

With respect to health status, two of the three participants (P1 and P3) described how concurrent conditions intensified their experience of embarrassment



and emotional distress during an episode of urinary urgency. P3's ambulation was slower and more painful due to a leg condition (i.e., sciatica), and her ability to direct her urine stream into the toilet was complicated by her need to stand while urinating. She explained,

“you know it's [urine] all over [*laughs*], it's not very nice ... Oh all over... the toilet and everything and sometimes the floor and you know.” (#16).

Together, P3's difficulties further contributed to a sense of inadequacy because she was unable to conform to the most fundamental aspects of urination practices (i.e., urinating into the toilet bowl). Similarly, P1 encountered difficulties ambulating stairs independently following a recent abdominal surgery, which complicated her entry into her daughter's home after leaking a large amount of urine on her pants. She stated,

“‘cause I couldn't go upstairs at that point, I wasn't supposed to, and the ground level door, there's steps up to the first level. So I had to take, he sort of always carried me up the stairs, boosted me, because I was fresh out of something, one operation, I guess the first one. And I couldn't, you know, maneuver the steps very well, and there's no hand railing at that point on those steps.” (#30)

Although P1's urine leakage was conspicuous because of its extent and location on her clothing, her close contact with the family member who provided physical assistance ensured his perception of the leak, and intensified her feelings of embarrassment and distress.

## CHAPTER SIX: DISCUSSION

The aim of this qualitative investigation was to ascertain the mode and manner of appearance of urinary urgency in the lives of ambulatory incontinent women diagnosed with Overactive Bladder Syndrome from a psychological perspective. In this chapter, a summary of the psychological features of urinary urgency is presented first, followed by a discussion of these features in relation to the scientific knowledge on this topic. The findings are also discussed with respect to their implications for clinical health psychology practice and research in OABS. Lastly, the strengths and limitations of the empirical phenomenological-psychological approach in this project are presented.

### I. Summary of Findings

Urinary urgency occurred sporadically in the context of everyday life, and in all kinds of settings, such as at home, in the workplace, in the car, as well as at entertainment or athletic venues. The primary psychological feature of the lived experience of urinary urgency in this study was the participants' sense of inefficacy to contain urine. There were subtle differences in terms of how urgency was lived through when it was associated with the concomitant onset of a urine flow (*flow urgency*) or the sense of an imminent flow (*pre-flow urgency*). Instances of pre-flow

urgency involved a sense of inefficacy about containing the urine any longer that it already had been, whereas instances of flow urgency were described as a flow of urine that sufferers felt powerless to stop. The participants' sense of inefficacy to contain urine evoked feelings of pressure to perform continence behaviors and uncertainty about whether they could be achieved satisfactorily. More generally, the experience of urgency was associated with heightened levels of emotional arousal, and in virtually all instances, participants' initiated a behavioral response to find and use a toilet to urinate (i.e., continence behaviors). The presence of concomitant health problems that slowed ambulation (e.g., sciatica, post-surgical abdominal muscle weakness) and the appearance of the sense of inefficacy to contain urine in situations where toilet access was impeded (e.g., highway gridlock) intensified the level of emotional arousal experienced by the participants, as well as the sense of pressure and uncertainty about reaching the toilet.

The context in which urinary urgency occurred played a role in the kind of psychological and social consequences that OABS sufferers endured. When urinary urgency appeared in public, social or professional settings, it evoked the disclosure of urinary flow through public displays of leakage (flow and pre-flow variants), excusing oneself from social settings to urinate (pre-flow variant), and/or urination in a public setting (pre-flow variant). Irrespective of whether participants remained continent, all episodes in social settings involved the experience of emotional distress, embarrassment and a sense of inadequacy. In contrast, when pre-flow or flow

urgency appeared in home dwellings, episodes were perceived as inconvenient or bothersome. Participants in home settings did encounter the emotional arousal associated with responding under pressure to perform continence behaviors, and a sense of uncertainty about whether they would be able to perform them adequately, but they did not report emotional distress, embarrassment or a sense of inadequacy associated with these occurrences. In private settings, episodes of pre-flow and flow urgency motivated the use of a toilet in order to urinate, or to complete urination that had already initiated, as well as to change pads/clothes that had become wet.

Participants used material, psychological, medical and relational strategies to manage urinary urgency, which were recognized as either preventative or compensatory. Preventative measures were oriented towards anticipating urgency episodes and altering its predictable trajectory, whereas compensatory measures were oriented towards coping with the consequences once urgency occurred. Medical assessment/consultation and treatment aimed to reduce and/or eliminate urgency. Preventative material strategies included the use of pads, which alleviated the sense of pressure and uncertainty about reaching a toilet when flow urgency appeared, and wearing dark clothing in public settings to avert the disclosure of urinary flow and its associated consequences. Compensatory material strategies, such as changing or modifying clothes, were performed to alleviate the negative emotional consequences after urinary flow had been disclosed to others. Relational strategies, which referred to the support and encouragement from friends and family, were compensatory

because they moderated the embarrassment and emotional distress associated with disclosures of urine flow. Psychological strategies were employed to manage situations in which urinary flow could be, or had been, disclosed in public settings. Compensatory psychological strategies included reliance on anonymity and concealment of urine leaks on clothing to assuage emotional distress and embarrassment, as well as the transformation of negative emotional consequences into an appreciation of the blessings of familial love and affection. Preventative psychological strategies occurred in situations where participants anticipated the disclosure of urinary flow and its negative emotional consequences were pre-empted through use of social distance to ensure privacy (i.e., during public urination). Preventative psychological strategies were also used to mitigate the appearance of urinary urgency. “Assurance behaviors” reduced the demand for urine containment through frequent voiding, limiting fluid consumption, and physical maneuvers to ensure the bladder was fully evacuated, which averted how often urgency emerged. Close proximity to toilets and, when ambulation difficulties were present, restricting travel to places where the washroom locations were well known (“proximity behaviors”), were used to avert episodes of urgency by alleviating the sense of pressure and uncertainty to perform continence behaviors.

## II. Dialogue with Literature

This qualitative investigation was undertaken to ascertain the experience of urinary urgency in female ambulatory OABS sufferers from a psychological perspective. To date, only two prior qualitative investigations regarding OABS have been conducted: the first, an examination of the impact of OABS on sufferer's quality of life (Nicolson et al., 2008), and the second, an examination of the impact of OABS on family members (Coyne et al., 2009). This section begins with a comparison of the similarities and differences between the current findings and the experience of urgency as outlined by Nicolson et al. (2008), and then a discussion of the findings in terms of how they contribute to the inter-subjectivity of urinary urgency between patients and health care practitioners is presented. The contributions of the present study within the context of other literature are also discussed. As noted earlier, the OABS diagnosis was introduced as part of a nosologic revision of bladder storage disorders in 2002, and therefore, references to this diagnosis do not appear in the medical literature published prior to this date. In this section, research studies with medical patients diagnosed with urge UI of an idiopathic origin, the equivalent diagnostic term used prior to 2002, are included in the discussion. UI may also occur as a condition secondary to neurological conditions (e.g., brain disease, spinal cord injury), which has a different illness trajectory (Fowler, 1999), and thus, are not discussed.

### *Comparison of the Present Findings with Nicolson et al.'s (2008) Study*

The findings of the Nicolson et al. (2008) study are difficult to integrate with the results of the present study due to the major differences between the qualitative approaches employed. The aim of the Nicolson et al. study was to extract themes that revealed the impact of OABS symptoms on sufferer's quality of life, and the analytic procedure extracted the "experience of urgency" as one of six themes. In contrast, the aim of the present study was to delineate the psychological features of the lived experience of urgency using a phenomenological (structural) analysis of subjects' descriptions from the *life-world*, and presented a single structure with eight constituents. Direct comparisons between the studies are hard to make because Nicolson et al. sought to delineate an explanatory framework for OABS, whereas, the present study focused solely on the meaning of urgency in incontinent OABS sufferers. However, given the limited amount of information regarding urgency in the published literature, the results of the present study were examined in light of the Nicolson et al. findings for the purpose of gaining additional insight into this topic.

Although the Nicolson et al. (2008) study did not explicate the psychological features of the urgency experience, some of the results displayed congruence with the structural findings of the present study. For example, Nicolson et al. described urgency as "revolving around the everyday experience of the 'key-in-the-lock syndrome' ..." (p. 348), and referred to a sudden need to urinate that impelled a rush to the toilet after inserting a key into the door of their home. In addition, the authors

depicted the urgency experience using this participant's description, "sometimes when you suddenly think you want to go one almost doesn't get there in time" (p. 348), as well as this quote, "like when I'm doing the washing up and that, with water running I had to rush off and so forth" (p. 348). These descriptions were congruent with the constituents of the structural analysis in that they illustrated situations in which sufferers lived through an *awareness of a sense of inefficacy to contain urine* because they could not "hold" onto their urine. Also, implicit in sufferers' descriptions was a *sense of pressure to reach a toilet* because they ran towards the toilet, and *uncertainty about reaching the toilet* because they felt at risk of urine leakage.

Some of the findings of the Nicolson et al. (2008) study diverged from the structural findings of the present study, however. For example, focus group participants in the Nicolson et al. study reported the presence of psychological triggers of urinary urgency (e.g., running water), whereas participants in the present study did not report such occurrences. In addition, Nicolson et al. depicted an experience of urgency in which the participants' initial awareness of the need to urinate dissipated immediately and did not evoke an actual behavioral response to use the toilet (i.e., continence behaviors). The authors presented this quote from a male participant to illustrate this situation,

"I have found, when at home, sometimes I sort of think I must rush to the toilet suddenly, and something happened and taken my mind off it, and *it's gone off...*"  
(p. 348; italics added)



This depiction of urgency was not congruent with the sense of *uncertainty to reach a toilet* uncovered as a constituent in the structural findings of the present study, because it depicted mental distraction as a means to circumvent urination. It was also unlike Nicolson et al.'s earlier depiction of urgency as a 'key-in-the-lock' phenomenon that demanded immediate action to use a toilet. As mentioned in the previous section, virtually all instances in the present study were associated with the initiation of a behavioral response, and in the one instance where behavior was not initiated, continuous emotional distress and concern related to the participant's inability to leave the situation was reported and reflected her uncertainty to reach a toilet. Descriptions of urinary urgency in the urological literature also underscore the sense of uncertainty about being able to contain urine until reaching a toilet during an urgency episode (e.g., Chapple et al., 2005).

The divergence between the descriptions of urgency in the Nicolson et al. (2008) study and the present study can be accounted for in other ways, however. Examination of the participants' characteristics in the Nicolson et al. study revealed that the participant who described urgency as an experience that could be terminated by mental distraction had not received a formal diagnosis of OABS from a medical professional. In fact, all focus group members, which comprised 66% of the sample, were deemed eligible for inclusion based upon responses to a brief screening questionnaire for OABS symptoms. In contrast, the three women in the present study

had received a diagnosis of OABS from a licensed urologist. Thus, the variability of the *sense of uncertainty to reach a toilet* across descriptions of urgency in the two studies may be due to differences in the urological status of the participants, and more specifically, the pathophysiology underlying the LUT symptoms. The practice of using participants' reports of LUT symptoms to study OABS has been a matter of concern in urological discourse. As noted in Chapter Two, there is a wide gap between patients' reports of LUT symptoms and the ultimate diagnosis based on a full clinical assessment (Brubaker et al., 2006; McGuire, 2000), and studies using this recruitment strategy have limited validity due to the uncertainty about the genuine medical status of the participants.

Comparison of the similarities and differences between the structural findings of the present study and the experience of urgency in other qualitative studies is limited by the small number of studies available for review at this time. Additional qualitative investigations regarding the experience of urgency in patients diagnosed with OABS would assist in the development of a more comprehensive understanding of this phenomenon.

### *The Inter-subjectivity of Urinary Urgency*

As mentioned in the first chapter, the differentiation of the symptom of urinary urgency from the everyday experience of urinary urge has become an important and controversial issue following the introduction of Overactive Bladder Syndrome into

diagnostic nosology (Blaiwas et al., 2007; Chapple et al., 2005; Starkman & Dmochowski, 2008). The mode and manner of appearance of urinary urgency described in this investigation highlight at least three qualities that may be of assistance in distinguishing UU from everyday urges to urinate. First, a central psychological feature in the structural findings was the sense of *inefficacy to contain urine*, which reflected participants' lived experience of feeling unable to contain urine any longer than it already had been or a flow of urine that had already begun. These moments of *inefficacy to contain urine* evoked a *sense of pressure* to perform continence behaviors, as well as a *sense of uncertainty* about whether the actions taken would produce the desired effect (i.e., continence). In addition, these moments were associated with a heightened sense of emotional arousal that would further increase when participants encountered obstacles interfering with their goal of reaching the toilet (i.e., *idiographic health and environmental circumstances* constituent). Lastly, episodes of urgency resolved after participants used the toilet (i.e., pre-flow and flow variants) and/or concealed the leak (i.e., flow variant only). Knowledge of these features, as well as the temporal unfolding of the urgency experience (flow vs. pre-flow variations), may have utility for physicians who are attempting to discern urinary urgency from urge when consulting with patients. Moreover, these characteristics may be useful in the design or revision of urgency assessment questionnaires for use in research settings. The strength of these data lies in its fidelity to how the experience appeared in the sufferer's *life-world*, but the

absence of a representative sample limits the ability to make predictions about how common (or rare) this type of urgency is in the *life-world*. Therefore, pilot studies would be needed to investigate how frequently these features occur in a sample of OABS sufferers, and whether these features are gender-specific.

During the process of conducting the present study, it was observed that participants' descriptions of flow urgency were not always congruent with medical definitions of urgency incontinence. Instead, descriptions of two urgency episodes depicted urine leakage while running, which according to medical guidelines, reflect episodes of stress incontinence rather than urgency incontinence (Fantl et al., 1996; Wein & Rovner, 2002). In order to ensure that participants' situations reflected their lived experience of urgency, definitions or explanations were not provided during the study procedures. In addition, during analysis, the theoretical knowledge that these instances reflected stress incontinence was suspended as part of an approach that sought to ascertain what aspects of these *life-world* descriptions revealed about urgency as lived. Within a phenomenological framework, these observations are revelatory of how the patient's experience of urgency in the *life-world* is much broader than the standardized definition communicated in the medical guidelines. The medical meaning of urinary urgency reflects a specialized disciplinary knowledge of its biological basis that follows from a scientific reduction of the experiential world (i.e., the *life-world*). In contrast, within the *life-world*, persons spontaneously encounter changes in the lived body, and how these changes are understood depends

upon one's own knowledge, as well as cultural beliefs and stereotypes (Ashworth & Hagan, 1993). As such, *life-world* meanings may not necessarily include an understanding of the biological basis of the change. The medical view is that the characteristics of the situation in which urine leakage occurred (i.e., the running) reflects clues about what might be unfolding biologically (i.e., abdominal pressure), and precludes the presence of urinary urgency (i.e., a pathological sensation as the cause of the leak). In the *life-world*, however, OABS sufferers did not apply this disciplinary-type of analysis or knowledge to their episodes, and therefore, urgency was reported as part of stress leakage episodes.

The enhancement of inter-subjectivity about urinary urgency in medical settings requires an understanding of how patients experience urination in the *life-world*. For medical practitioners, the broad *life-world* meanings related to bladder storage are often a mismatch to health terminology (Ashworth & Hagan, 1993). Empirical studies report that patients lack knowledge regarding LUT terminology, which has been a source of concern for physicians (Digesu et al., 2008). Patient education has been proposed as a way to ensure they understand relevant medical meanings (Abrams et al., 2012; Digesu et al., 2008), but the manner in which patients are to arrive at such knowledge has never been explicitly stated. In fact, physicians have historically avoided providing “medical meanings” to patients during consultations due to fears of influencing their subjective reports (i.e., patient suggestibility; Abrams et al., 2012; Brubaker, 2004). But what of the patient's need

for inter-subjectivity (Marcum, 2004)? The biomedical understanding of urinary urgency is based on empirical data regarding the sensorial and pressure-volume characteristics as the bladder is filled artificially and in laboratory conditions (Denny-Brown & Robertson, 1933; Heeringa, DeWachter, Van Kerrebroek, & Van Koeveringe, 2011; Nathan, 1956; Wyndaele, 1998; Wyndaele & DeWachter, 2002; Wyndaele & DeWachter, 2008). These methodologies lack fidelity to how urinary events unfold in the context of everyday life. Bladder filling may be a continuous biological process that can be measured and imaged with the assistance of technology, but as demonstrated in the present study, experiences in the *life-world* did not involve awareness of the bladder itself, nor did they involve knowledge of actual volumes *in situ*. While the role of medical practitioners involves the assessment and treatment of “bladder function”, the human sciences will orient towards *life-world* experiences of urination, which might be better understood as “urinary regulation”. Only recently have the human dimensions involved in the decision to void, such as planning, anticipation and the appreciation of bladder fullness, been the subject of research (Harvey et al., 2012).

Given that the present study focused upon the appearance of urgency in the *life-world*, it afforded an opportunity to examine the relationship between urgency and the onset of urine flow. The present structural findings demonstrated that incontinence was not an essential feature of the phenomenon of urgency. Instead, the *disclosure of urinary flow* was an essential feature when urgency appeared in social

contexts, and had three variations: urination in a public setting, a leakage event that was visible to others, or a disclosure of the need to urinate to others. These findings highlight the multiple outcomes of urgency in the *life-world* and diverge from the linear medical models of urgency as the cause of UI (Abrams et al., 2012; Chapple et al., 2005). In addition, these observations have practical significance for the measurement of urgency. Several widely-used questionnaires evaluate the severity of urgency by referring to the appearance of UI. For example, the Patient Perception of Intensity of Urgency Scale (PPIUS; Cartwright, Panayi, Cardozo, & Khullar, 2009) is a five-point ordinal scale that asks respondents to rate their urgency when they void or leak. Response categories include: 0, no urgency (“I felt no need to empty my bladder but did so for other reasons”), 1, mild urgency (“I could postpone voiding as long as necessary without fear of wetting myself”), 2, moderate urgency (“I could postpone voiding for a short while without fear of wetting myself”), 3, severe urgency (“I could not postpone voiding but had to rush to the toilet in order not to wet myself”), and 4, urge incontinence (“I leaked before arriving at the toilet”). Note that ratings of urgency severity are made contingent upon the appearance of UI, since only those respondents who experience UI can endorse a rating of “4” on the Cartwright et al. scale. Such rating scales conflate the measurement of one variable (urgency) with its potential outcome (incontinence), and have limited utility for OABS sufferers who remain continent during urgency episodes. In summary, the findings of the present study underscore the many possible outcomes of an urgency episode, and to ensure

fidelity with these experiential variations, urgency questionnaires need to be revised so that evaluations of urgency are independent of the appearance of UI.

### *Contributions of the Present Findings and Implications for Future Research*

There can be no doubt that adequate regulation and control of urine excretion from the bladder is a vital part of human functioning. For over seventy years, medical and psychological research has sought to build and refine an understanding of the prevalence, biological basis and psychosocial impact of UI. Many positive outcomes have ensued, including the development of broad-based, empirical guidelines for the clinical assessment and treatment of the condition (Borrie & Valiquette, 2002; Fantl et al., 1996). However, the recognition of UI as a medical condition has had little impact upon negative stereotypes regarding the loss and/or decline of urinary function with age, and sufferers respond to the problem with secrecy and shame (Ashworth & Hagan, 1993). The cultural ideal, according to Peake and Manderson (2003), is that one remains in control of one's body, including their bladder and other bodily functions. Despite the significant psychosocial and economic burden associated with urgency UI, sufferers fail to seek help from healthcare providers, and strive to conceal the problem from friends and family.

Over the last decade, diagnostic advances have afforded new ways to engage the topic of bladder storage disorders, and led to studies that challenge widely-held stereotypes about continence and aging. While this issue was not the primary aim of



the present study, the literature review uncovered evidence suggesting that changes in urinary function occur several decades before the onset of UI. Evidence also revealed that patients resist the term “incontinence” to describe their condition; for example, Ashworth and Hagan (1993) reported that “[incontinence]... was too strong to describe their condition. Having the ‘odd squirt’ or ‘leaking’ seemed more accurate...” (p. 1419). Empirical data of non-neurogenic UI patients reveal that they encounter one to three UI episodes per week on average (e.g., Corcos et al., 2005), which amidst an average of 56 other voiding events, reflects a “toileting failure rate” of less than 2-5% overall. Taken together, the evidence supports the idea that continence problems can no longer be considered a matter of “old age”, nor is it an all-or-nothing property or characteristic. Patient’s resistance to the term incontinence may reflect a desire to have their condition described in ways that reflect their experiences of both successful (95-98% of the time) and unsuccessful voiding (2-5% of the time). The next steps are to begin sharing this professional information with OABS sufferers, as well as the public, so that stereotypes about (in)continence can be addressed more effectively.

The present investigation took advantage of recent diagnostic advances to prioritize the study of urinary urgency in females diagnosed with Overactive Bladder Syndrome. The approach was chosen as a means to innovate and expand upon what is already known about bladder storage disorders from a psychological perspective. As discussed in Chapter Two, previous psychological research had investigated

urge/urgency as an instinctual impulse that became problematic due to psychological triggers (e.g., neurotic personality traits, emotional states and/or sensory-perceptual stimuli), high levels of behavioral responsiveness to the impulse, and/or anxiety or phobias about urge, urination or using the toilet (e.g., Ghei & Malone-Lee, 2005; Poole & Yates, 1975; Renik, 1981; Straub et al., 1949a; Vereecken, 1989). More recent approaches examined the psychological health of persons with UI, such as anxiety and depression in relation to the burden of illness (e.g., Bogner et al., 2002; Burgio et al., 2001; Vigod & Stewart, 2006). Rather than focus on the psychological causes and/or consequences of urgency, the present study sought to ascertain its psychological meanings in the sufferers' *life-world*. Investigation of the subjective experiences of urinary urgency was felt to be a much-needed complement to what is already known about the clinical and biological dimensions of OABS.

The decision to proceed with urgency as a central focus of investigation was also based on the knowledge of communication barriers about UI and the negative impact of non-disclosure on the trajectory of this condition. Psychological studies have demonstrated the negative impact of shame on disclosure in psychological settings (e.g., Hook & Andrews, 2005; Macdonald & Morley, 2001), and it was important to consider how clinical health psychology interventions could assist. It was speculated that OABS sufferers may be more willing to disclose how their urinary regulation has changed (i.e., the experience leading to toilet use) rather than about urine leakage itself. The results of the present study revealed that psychological

features of urgency (e.g., sense of inefficacy, pressure to get a toilet, and uncertainty about performing continence behaviors successfully) may be useful for enhancing discussions between health care practitioners and patients, particularly when discriminating urgency from normal urge. In addition, these features may be useful in raising awareness about the earlier stages of bladder-related illness in community-dwelling individuals, because they may be more palatable than urine leakage as a topic for discussion. Future research could apply these data in a public health pamphlet explaining the early signs of continence problems and evaluate women's intentions to seek out care and their expectations of efficacy about treatment.

In the context of other literature, what is unique about the data from the present study is that the psychological structure supports a conception of urine containment as an embodied, generative capability that is influenced by one's sense of efficacy, or self-belief in that capability. As mentioned earlier in this section, prior qualitative investigations have largely focused on understanding the experiences of UI, which have emphasized themes related to the loss or lack of physical and psychological control as a central feature (Ashworth & Hagan, 1993; Brown et al., 1998; DuBeau et al., 1998; Hägglund & Ahlström, 2007; Nicolson et al., 2008). The concept of "lack of control" connotes a "fixed property that one either has or does not have within their behavioral repertoire..." (Bandura, 1991, p. 160) and is consistent with pervasive societal messages about the inevitability of UI with "old age". Such views have important implications for patient receptivity towards clinical

interventions. As a fixed property, lack of control evokes expectations that UI is to be “accepted and managed rather than reversed or cured...” (Mitteneß & Barker, 1995, p. 195). On the other hand, the concept of inefficacy offers potential for therapeutic change when modes of treatment are directed toward the restoration of efficacy or self-belief, in association with skills development. As noted by Bandura (2001), efficacy beliefs “are the foundation of human agency. Unless people believe they can produce desired results and forestall detrimental ones by their actions, they have little incentive to act or to persevere in the face of difficulties...” (Bandura, 2001, p. 10).

The view of urgency as an episodic disturbance in women’s sense of efficacy regarding urine containment emerged as a result of working with *life-world* descriptions of urinary urgency (a bottom-up approach), rather than an application of psychological theory (a top-down approach). The idea that self-efficacy theory and therapy is useful for continence care has been raised in the literature. Tovian et al. (1994) advocated for the use of Bandura’s self-efficacy theory and training (e.g., Bandura, 1977, 2001) in patients with UI. Recent studies have reported positive therapeutic effects associated with self-efficacy training in children with enuresis (Ronen, Hamama & Rosenbaum, 2012). In the nursing sciences, self-efficacy in pelvic muscle training has been found to predict women’s levels of adherence in UI treatment (Messer et al., 2007; Shelton Broome, 1999). A new scale, the Geriatric Self-Efficacy Index for Urinary Incontinence (GSE-UI), was recently developed and validated to assess levels of confidence in the ability to contain urine (Tannenbaum et

al., 2008; Tannenbaum et al., 2009). The item content of GSE-UI suggests that the instrument would have utility in non-geriatric OABS sufferers, but validation studies would be needed to ascertain reliability in both dry and wet sub-types. The availability of a self-efficacy scale related to urine containment would permit the measurement of this construct during psychological treatment for urgency/OABS.

Opportunities to raise awareness about the psychological features of urgency (e.g., sense of inefficacy, pressure to get a toilet, and uncertainty about performing continence behaviors successfully) in the community may promote positive aging with respect to continence health. Early detection and treatment of OABS has the potential to alleviate psychosocial and economic consequences that characterize this illness when it is self-managed for long periods of time. Early detection may also afford patients greater opportunities to choose amongst effective conservative treatments, including pelvic floor physiotherapy, behavioral modification, psychological treatment and acupuncture. Moreover, a focus on urinary urgency promotes attention towards the internal factors contributing to continence problems (e.g., pelvic floor musculature strength and use) rather than external/environmental factors, such as pads and toilet proximity, that only serve to mitigate the social consequences of leakage (e.g., embarrassment). The development of psychological interventions that address the sense of inefficacy in OABS sufferers may also offer a constructive alternative to the fatalism that has pervaded UI research and treatment. Bandura's (1984, 1990, 1991) research underscores the regulatory role of self-belief in

influencing the intensity and persistence of effort, and the role of social self-appraisal in raising or weakening beliefs of self-efficacy. As such, the application of Bandura's social cognitive theory and intervention techniques may have utility in treatment of urinary urgency/OABS (e.g., Bandura, Adams & Beyer, 1977).

### III. Extrapolation of Study Findings

One of the aims of this project was to enhance inter-subjective communication about urgency in health settings. As noted earlier, the advancement of OABS created a demand for more robust communication between physicians and patients, and physicians acknowledged a desire to know more about the meaning of urgency from the perspective of OABS sufferers. Based upon the results of the data analysis, as well as a systematic review and reflection of the literature, this section presents a summary of the most salient findings about urinary urgency, followed by the implications of this information for clinical care and future research.

#### *Salient Findings:*

1. Women expected themselves to regulate when and where urination occurred, and urgency episodes were revelatory of their sense of ineffectiveness in this regard.

2. Women experienced negative personal and social effects during episodes of urinary urgency, including threats to their sense of productivity, presence and enjoyment. These effects were apparent whether or not urine leakage became visible to other persons.
  
3. Women's experiences of urgency were embodied in that they perceived a changing relationship to their social and physical environments rather than changes in their physiology as such (i.e., as internal sensations).
  
4. Women anticipated and feared the onset of an episode of urinary urgency and made adjustments to their daily lives. Such adjustments, including pads and medical treatment, did not completely restore their ability to meet urinary needs, nor their sense of comfort in social situations.
  
5. Women's experiences of urinary urgency were associated with changes in personal or professional identity and the threat of social rejection.

*Facilitating Change in Patient-Practitioner Interactions and Health Settings*

The findings of the study suggest that OABS sufferers would benefit if both the biological basis of urinary urgency, as well as its psychosocial aspects received attention in patient-practitioner interactions. While the procedures of differential diagnosis are the mainstay of medical visits, and vital to ascertaining the biological system considered most responsible for the signs and symptoms (Yardley, 1999), OABS sufferers' motivations for health care seeking may not align directly with physicians' care objectives. Medication and/or surgery are ideal ways to address the biological basis of urinary dysfunction, but these problems often persist despite multiple attempts at treatment. Furthermore, since women do not construe urinary urgency in biological terms, their motivation for care may reflect their desire for improved life quality in the face of personal and professional health burden. Thus, under these conditions, therapeutic efforts could lend more weight to psychosocial care needs rather than symptom cure or reduction.

At the same time, the negative personal and social sequelae associated with urinary urgency, as well as the length of time that elapses prior to treatment-seeking, suggests that psychosocially-oriented care may be particularly helpful to identify and address mental health risks. The conditions endured by OABS sufferers suggest that they face social isolation or feelings of disconnection and altered self-concept/self-worth. Since episodes of urinary urgency were revelatory of their sense of ineffectiveness with urinary regulation, these perceptions may generalize to a self-



concept of worthlessness or personal inadequacy (e.g., self-as-ineffectual). Such self-construals are associated with greater risk of anxiety and depressive disorders, lack of self-confidence (e.g., belief in one's inadequacy), fear of being discovered as inadequate, expectations for negative feedback (embarrassment, rejection and disapproval), and the use of maladaptive coping efforts (e.g., avoidant and/or socially dependent behaviors) (Waxman, 2012). Although currently available nurse-led behavioral modification programs provide a means to alleviate urinary symptoms, these models do not conceptualize the shifts in self-construals during periods of loss and recovery of urinary function. Health psychological models oriented toward helping sufferers make sense of their experience and create viable roles for themselves in the world can offer therapeutic advantages in this regard.

The results of the study suggest that early detection of OABS is unlikely to be effective if health-related information conveys biologically-based information about urinary urgency. Although studies have suggested that women are interested in learning more about the biological basis of urination after having consulted with their physician, such understandings were generally not part of the *life-world* experience of urinary urgency in the female participants interviewed in the present study. These findings were also consistent with the work of Mitteness (1990), who reported that cultural understandings about UI remain firm in community-dwelling individuals due to limited knowledge about its biological basis.

The study findings also suggested that the women perceived urinary urgency in terms of their changing relationship to social and physical environments and the negative personal and social effects associated with these shifts. One implication of these findings is that women's motivation for care-seeking may be to restore or regain these relationships (i.e., improve quality of life), rather than to seek answers about local or central nervous system pathology (e.g., tumors, neurological problems). Another implication is that health promotion efforts, such as brochures, would have the greatest salience in this population if they describe these subtle shifts (e.g., feeling pressed to reach a toilet, feeling ineffective in holding onto urine, struggling to contain urine due to mobility challenges) and the potential benefits that could be gained with treatment.

With respect to my objective to enhance inter-subjective communication about urgency in health settings, the implications of viewing urinary urgency from a relational perspective may be resisted in medical settings. Reports from primary care professionals indicate the presence of numerous barriers to continence assessment and treatment (e.g., poor reimbursement rates, time constraints, lack of knowledge of assessment/treatment) (Mittiness, 1990; Shaw et al., 2007). Patient-physician appointments are brief and discussions about how one's *life-world* has been changed by urinary urgency may entail discussions that do not fit into the "schema" of medical visits. The development of a screening instrument to assess urinary health/regulation may reduce this burden, however. Questionnaire items could inquire about actual

urine leakage, urinary-related disruptions in their relationship with the social and physical world (e.g. how they move about in cars and on transit, in shopping malls, and do activities with others), and related emotional sequelae (Coyne et al., 2009; Nicolson et al., 2008). From a health promotion perspective, the utility of the instrument would lie with its ability to detect early signs of difficulties (i.e., OABS-dry), as well as more well-established problems (i.e., OABS-wet), its construct validity, as well as its sensitivity and specificity to detect presentation patterns that are well-suited for referral to specialists or to continence programs (where available).

#### IV. Strengths and Limitations

One of the strengths afforded by a phenomenological psychological approach is that it offers an opportunity to investigate experiences of illness in a holistic way. As noted by Radley (2000), the research and practice of health psychology has largely appropriated a biomedical view of the body as a “physical substrate to the mind...” due to its close alliance with the medical profession (p. 298). As such, the interests of health psychologists are typically directed toward mental phenomena (e.g., beliefs, attitudes, behaviors) related to the situational unfolding of a biological disease process across time, including the detection of symptoms, clinical presentation, and psychosocial coping. However, the disciplinary focus on the materiality of the body has been criticized by social scientists for its lack of adequacy in the recognition and

investigation of contemporary issues in medicine, such as disruptions to personal identity within the context of chronic illness (Bialystock, 2006; Nicolson et al., 2008; O'Connor, 2003; Radley, 2000; Shildrick, 2008). The approach used in the present study was inter-subjective, holistic and embodied in the sense that the analysis performed by the researcher considered the *life-world* relations of all participants as a variation of her own embodiment while discerning meanings (Giorgi, 2000b). Moreover, its focus was to produce psychologically-sensitive descriptions of the lived experience of urinary urgency in terms of what the experiencer was present to and their connection with the *life-world*. Material or biologically-based accounts of illness were avoided (via bracketing and the reduction) to retain fidelity to the participant's experience in terms of what was in their direct awareness as they encountered the phenomenon in everyday life.

Given that the aim of this research project was to specify the general characteristics that define the *life-world* experience of urinary urgency in incontinent women (the structure), the credibility of its findings was enhanced through use of multiple *life-world* instances of the phenomenon. The use of multiple participants was important for the discrimination of general aspects of the phenomenon (i.e., a type of urgency) from the particular styles of living through the experience by any one individual. In addition, multiple instances of urinary urgency collected from the same participant enabled a more in-depth examination of the phenomenon across the various contexts in which it occurred, including professional, personal and

familial/social situations. A total of eighteen instances of urinary urgency and/or incontinence were examined in this analysis, and all participants described at least two (P1: two, P2: nine, P3: seven). Moreover, the participants' descriptions revealed that not all urination-related events (e.g., frequency of urination, incontinence, desire to void) appeared to the subjects or to the researcher as urgent. For example, one participant described the appearance of a strong need to use the toilet while on the way to her daughter's home for a celebration (urgency), as well as a second, discrete instance in which wetness (urine) appeared in her underwear while in the privacy of her home that both were inconvenient and distasteful, but not urgent (P1). A total of eleven non-urgent urination-related instances were observed across the three transcripts (P1: one, P2: eight; P3: two). In the analysis, these non-urgent urination events served as actualized negative examples that, in combination with the non-actualized negative instances imagined by the researcher, enabled revision and further clarification of the features of urinary urgency.

The rigor of the study design was enhanced through the consideration of theoretical and methodological consistency, which refers to the extent of adherence to the paradigm set out by the designated methodologist (Giorgi, 2006a). One error occurred in the interview schedule when the scholarship of another phenomenological psychologist was consulted for direction regarding interview questions. The adoption of Keen's (1975) interview technique required that participants provide a direct response to a question of the (personal) meaning of urinary urgency. The potential for

disruption arose in the analysis stage when the researcher became aware of the inconsistency between the methodological procedures of Keen (1975) and Giorgi (2009). Specifically, Keen's question was based on the presumption that participants' meanings were accessible in the natural attitude and did not require specific procedures to access them, which conflicted with Giorgi's presumption that meanings are lived rather than known by the subject, and a phenomenological attitude is required to access them (Giorgi, 1995*b*, 2006*a*, 2006*b*). Examination of the participant's responses to the question inspired by Keen's (1975) methodology revealed that they met the minimum criterion for inclusion in the analysis, and so the inconsistency was resolved by analyzing the data with EPP methods. Ultimately, the process of supervision was imperative to detect errors of inconsistency during the training period and to mitigate their impact on the results of the study. This instance of inconsistency was a potent example of the difficulties inherent in the practice of combining procedures from different methodologists.

Phenomenological-psychological studies are dependent upon study participants' disclosure to generate its findings. One of the limitations of the present study is that the female study participants may have censored their accounts regarding urinary urgency and incontinence due to feelings of vulnerability, shame and/or discomfort. Despite the use of best practices in interviewing, it is possible that participants' feelings about these events motivated a need to self-censor to protect themselves psychologically. Psychological studies have demonstrated that shame is a

potent motivator to conceal aspects of the self (Hook & Andrews, 2005; Macdonald & Morley, 2001), and female sufferers have reported shame and embarrassment about episodes of urgency UI (Brown et al., 1998; DuBeau et al., 1998). There were no overt behavioral signs of emotional distress in the study participants during the interview sessions, and based upon interviewee feedback, positive rapport was facilitated by the presence of an interviewer of the same gender. Self-censorship is a factor that would affect the credibility of the collected accounts, and therefore, impact the discernment of meanings and the psychological structure generated by the researcher.

Moreover, participants were selected for inclusion in the study with the researcher's intention of maximizing opportunities to learn about the psychological aspects of lived experiences of urinary urgency in incontinent women, rather than establishing the frequency of the experience in a representative sample of a population. As such, the potential pool of study participants was limited to women who had recent experiences with these symptoms, a desire to articulate these experiences to the researcher, and who made themselves available to meet in a medical clinic where documentation related to their urological condition could be examined. This method of participant selection is frequently employed in qualitative methodologies where the aim of the research is to develop a rich and clarified description of an experience (Polkinghorne, 2005). The use of three participants enabled the discernment of the essential aspects through the appearance of

experiential variations across accounts, and reduced the burden on the researcher's imaginative faculties when trying to arrive at essential findings. As mentioned earlier in this section, the absence of a representative sample limits the ability to make predictions about how common (or rare) the discovered type is in the *life-world*, but quantitative methodologies could be designed to investigate the frequency (prevalence) of this type of urinary urgency in a female sample of OABS sufferers (Wertz, 2010).

The reliability of working with experiential data was enhanced through the use of bracketing and the epoché, but there were limits regarding the extent to which these abstentions could be practiced. The researcher acted in the role of perspectival agent in this project and made direct use of her consciousness to conduct the analysis. Thus, the bracketing procedure cannot remove the influence of the researcher's historical and social situatedness, and so no claim can be made regarding the ability to remove all presuppositions regarding the phenomenon of urinary urgency. Moreover, practitioners of phenomenology recognize that the psychological labor associated with freeing oneself from the natural attitude cannot be maintained as a consistent state by the researcher. However, the aim of the phenomenological procedures is to facilitate greater levels of openness and awareness to intuited meanings and it is the researcher's active attempts to do so, even if employed at less than their maximum limits, which afford this type of presence (Giorgi, 1976, 1993*b*, 1994, 2008). As a trainee in phenomenological practice, I was initially aware of the challenges in



cultivating presence to the subject's experience of a phenomenon due to the interference from previous biological and clinical psychological knowledge. In the later stages of analysis, I had learned to detect instances of overlay (i.e., failures in bracketing) in the transformations and correct them. The direct supervisory feedback was essential in learning how to identify instances in which I failed to free myself from the perspective of the natural attitude (i.e., positing the existence of what is presented; Giorgi, 1981, 1982, 1985a).

The matter of transferability in qualitative research refers to the applicability of study findings obtained in the original context to other contexts where the people or settings have different characteristics (Lincoln & Guba, 1985). The results of the present study are most relevant to community-dwelling women who suffer from idiopathic urgency UI of similar age to the female participants (50 -75 years of age), who possess stability in terms of their current urological status (e.g., no acute or serious conditions) and who are not reliant on regular assistance from health care workers for continence or other health-related matters (e.g., dementia, ambulation). As mentioned earlier in this dissertation, it was expected that the differences in onset, natural history, and treatment-responsiveness of urgency UI between males and females would create unique influences on how urgency presents itself in the sufferer's *life-world*, and since this study's findings are based solely in women's experiences, they may or may not be applicable to male OABS sufferers. Ultimately, the question of whether or not the lived experience of urinary urgency in men differs

from women is an issue requiring empirical investigation. Likewise, since the present study excluded female participants who co-presented with bladder pain or whose urinary urgency was secondary to bacterial infections in the bladder (UTI's), the findings of the present study are unlikely to assist in the understanding urinary urgency arising in these clinical situations. This study focused on the experience of urinary urgency in incontinent women, and thus, the experience of urgency associated with UTI's was excluded on the basis of its transient and recurrent temporality that was unrelated to the appearance of UI.

The transferability of the study findings is also influenced by the demographic, economic and cultural characteristics of the participants who contributed to the data set. The in-depth nature of the study required a small number of participants who were recruited from a middle-class economic community. All of the three women in the study were Caucasian, middle class and educated to the Grade 12 level or beyond, and this level of homogeneity afforded a greater level of rigor in terms of the applicability of the findings to women of shared similar demographic and economic characteristics. At the same time, however, the findings generated from this group of participants are limited in their applicability to women of different race, culture and socio-economic status. During the period in which this study was being conducted, two other qualitative studies offered contributions to the understanding of urinary urgency, and are the first of this kind in the academic literature. Urinary urgency and other OABS symptoms were studied in terms of their impact on family members

(Coyne et al., 2009) or the sufferers themselves (Nicolson et al., 2008). Coyne et al.'s (2009) study included 14 incontinent OAB patients, with 93% identifying their racial status as white, whereas Nicolson et al.'s (2008) study reported on gender only (n=18, 55% female). Taken together, these studies suggest that researchers are only in the beginning stages of developing an understanding of urinary urgency in OABS, but it would be of value to give consideration to culturally-sensitive research that includes immigrants, ethnic minorities, individuals of below average economic status, and females who have encountered cultural practices affecting the appearance and function of their genitalia and lower urinary tract (e.g., female genital mutilation).

While the present study sought to generate knowledge about urinary urgency in terms of the subjective perceptions of women, these experiences unfold within a complex social and cultural milieu. For example, Peake, Manderson & Potts (1999) shed light on the different social rules for women of different ages; parous women view continence difficulties as legitimate, whereas younger and nulliparous women are seen as breaking the "social-corporeal rules" and "not entitled to incontinence" in the same way as child-bearing women (p. 274). Different social rules may also exist for the elderly. That is, older women were allowed to be incontinent (i.e., to reveal lapses in 'control'), whereas younger women were not afforded such lapses (Mittiness & Barker, 1995). With respect to healthcare services, the absence of specialist knowledge about UI at the primary care level has led to concerns that if women chose to seek medical care, they will be responded to with cultural views that

UI is a “normal part of womanhood” and thus, nothing to worry about since its “only a dribble compared to having cancer” (Peake, Manderson & Potts, 1999, p. 282). These studies reveal the complexity of the broader context in which urgency UI unfolds, and the importance of understanding these spaces when developing new continence initiatives. Additional investigations regarding the role of gender in UI would be valuable in this regard.

Lastly, the use of EPP as a method in this study afforded attention to the qualities of urinary urgency in terms of how it unfolded to the participants’ consciousness, but limited the amount of attention that could be afforded to other aspects of their experience. I perceived these limitations in two different ways. On the one hand, I considered it unlikely that the interviews would elicit descriptions of urinary urgency episodes that took place during intimate moments (i.e., sexual intercourse). As mentioned previously, urgency UI is often an embarrassing experience, and I expected that it would be difficult for participants to share highly private situations in which it appeared. At the same time, the method of interviewing did not enable me to attend to participants’ perceptions of themselves or their worlds. For example, the interviews did not discuss topics such as how they viewed themselves and their bodies, their ability to date and have intimate relationships, their ability to find suitable employment, their relationships with healthcare providers, and how the condition altered their roles in the family. Although there are numerous studies of women with UI that discuss these topics, there are relatively few qualitative

studies that focus on OABS (i.e., urgency UI) and therefore, there is much to learn and discover in this area.

## V. Reflections on the Project

In this last section, I reflect upon the strengths and limitations of the participant selection and research situation in the broader context of OABS knowledge, my experiences and learning opportunities while generating the psychological structure, as well as thoughts about my growth as a clinician-scientist in psychology.

### *Participant Selection & Research Situation*

One of the strengths of the present study was the recruitment of OABS sufferers who had been diagnosed with OABS by a practicing urologist. Since I designed the study to examine the lived experience of urgency within the context of a medical condition, I used sampling procedures that would decrease the risk that urgency phenomena unrelated to OABS might be described. For example, women who have interstitial cystitis, urinary tract infections, anxiety, or who take certain prescription medications may also experience urinary urgency. The recruitment of a medically-naïve sample who reported urgency would have introduced sampling error, and use of LUT symptom questionnaires to categorize medical patients has been associated with high rates of false positives for OABS. Thus, I reasoned that the use

of an already diagnosed sample of OABS patients would be the best means to enhance credibility of study findings.

Similarly, in keeping with the aims of the project, the use of a medical sample enabled me to give priority to, and in some ways re-awaken, the kind of intersubjective *life-world* situation encountered by OABS patients in medical settings. Such situations ordinarily involve brief medical interviews about urinary symptoms, the deployment of diagnostic criteria and use of standardized terminology (e.g., which may or may not make sense to the patient; Digesu et al., 2008). Moreover, these are the situations that physicians have acknowledged to be problematic, at least in terms of the clarity of communication and the ability to cultivate inter-subjectivity with patients (Abrams et al., 2012). At the same time, patients attend such appointments with intent to describe their *life-world* condition to the physician - seeking to be heard, understood, and at times, submitting their bodies for examination. Thus, many facets of the research situation - the sample, the setting and the subject matter - reflected medical influences on the participants' construals of urinary urgency, and by analogy then, medical influences on my construal of urgency as a researcher.

Despite the narrowness of the medical context and the construal of OABS as a medical condition, I wanted to ensure, as much as possible, that the interview conditions would reveal the participant's sense of embodiment. Rather than categorizing or classifying the participant's responses according to biological or clinical criteria, I prioritized the expression of descriptive content about the

participant's *life-world* experience of urgency (i.e., *embodied accounts*). After the interviews were over, most of the participants conveyed surprise that they could ever have had so much to say about the topic! I viewed their feedback as highly complimentary both in terms of interview style and comfort, as well as the ability to achieve a sense of completion or fulfillment about the endeavor.

On the other hand, one of the risks of aligning myself with a medical conceptualization of OABS is that the knowledge produced is limited to a medical context. Thus, the *life-world* descriptions reflect a phenomenon that is already understood within a medical framework (Fainzang, 2013) and thus, precludes other kinds of constructions that may have been available to participants. In particular, the social and gender-based aspects of urgency would receive little to no attention and therefore remain unexpressed. Another concern associated with medicalization is the authority granted to medical providers to define health and illness, as well as the priority afforded to pharmaceutical solutions (Fainzang, 2013). Indeed, published articles regarding the implementation of behavioral health interventions in primary care settings illustrate how the activities of a behavioral therapist have become attuned to medication adherence, assisting physicians with mental health diagnoses, and physician satisfaction with the service (Kolbasovsky, Reich, Romano & Jaramillo, 2005). As a discipline, the practice of health psychology is often closely aligned with the medical system, and the issue of medicalization is one of several challenges faced by its practitioners (Yardley, 1999).

### *Generation of the Psychological Structure*

The psychological structure took me more than one and a half years to generate and involved an experiential learning process with what was initially a largely unfamiliar task. In the first few months, my many attempts to generate a structure failed completely, and left me skeptical of the methodology and prepared to revert to content analysis. In part, the difficulty lay in my own rigid adherence to the third and fourth transformed meaning units as written, which hindered my ability to describe at higher and more abstract levels (i.e., to generalize the data). At the time, I had been operating out of a well-intentioned desire to stay as close as possible to the original expressions, but this approach constrained my work to recapitulate and condense content (i.e., like an editing task). I felt unable (or possibly just too anxious) to generate written expressions based on the entire data set and obsessed about “missing something”.

At the same time, I encountered difficulties working with the data stored in the MS Word computer files. Early steps in the analysis involved working with each transcript separately and each table was housed in a computer file. Once the analysis shifted to consider all three transcripts simultaneously, these files were amalgamated into a single file 100 pages in length (i.e., Appendix F), which was wholly unsatisfactory for me to “hold in mind” all of the material needed to create a psychological structure. As deadlines approached, in the summer of 2013, to present the results at conferences, I began to explore ways to move the data to larger and



more visible spaces. I copied the content of the tables into a short hand that would fit onto 8.5 x 11” pieces of paper taped to my kitchen walls and cabinets. Each participant’s data was color coded (one color per participant) and collated into a string of six to eight pages (taped together, floor-to-ceiling). This visual technique fostered some perspective-taking on the data: seeing everything (literally) enabled me to “see” (intuit) with greater flexibility and self-trust. Actual data tables (Appendix F) were printed and kept handy for consultation while working.

The position that I initially adopted was that the data reflected two types of urgency: the first type emerged from P1 and P3, and the second emerged from P2. The data from P1 and P3 were easy to work with given that both described urgency followed by leakage, whereas P2 encountered urgency without leakage as well as urgency seemingly after stress leakage. I declared these differences too different and too difficult to incorporate into a single structure. While on the one hand, I was excited about the uniqueness offered by P2’s account, especially considering the level of familiarity I held in this area of study, I decided to create a psychological structure based on P1 and P3 for a presentation at the annual meeting of the Interdisciplinary Coalition of North American Phenomenologists (ICNAP) in May 2013.

The ICNAP presentation was an excellent learning opportunity and highly valuable in terms of understanding the role and value of psychological structures in phenomenological projects. In addition, I discovered an error in my analytic work. Despite using phenomenological procedures, I had extracted five constituents without

first preparing a holistic structure for P1 and P3. This error was significant in at least two ways. First, given the holistic nature of EPP, the absence of a structure led to the criticism from the audience that my work had originated from thematic, rather than phenomenological, procedures. In addition, the structure was sought out by the phenomenologists in attendance to test its validity through their immediate imaginal engagement, and its absence precluded them from performing this activity. Again, I found myself without a usable summary of the research findings for the project. However, since phenomenological procedures had in fact been employed, the identified constituents had value for the further analysis that was required.

That same summer, I had an opportunity to prepare a poster for the annual meeting of the Canadian Psychological Association. Since the transcripts of P1 and P3 had been worked with so extensively, I turned my analytic efforts to P2's transformed meaning units. Now armed with the knowledge about the role of the holistic structure in the analysis, I sought to undertake the final steps of the method to create one using P2's data. The presented poster included a holistic structure and nine constituents. Feedback from Dr. Giorgi indicated that this structure contained too many particularities of P2 and was not sufficiently generalizable. Thus, the work failed to meet two of the four criteria of human science (i.e., the knowledge was general and able to withstand criticism; Giorgi, 2000*d*).

After returning from the conference, I engaged in a re-evaluation of my activities with the transcripts, including my initial decision to seek out two

experiential structures. Several issues were considered. First, it was important to acknowledge that failure to locate a single structure could result from failure of a novice investigator to apply the method adequately, or from the phenomenal qualities of the phenomenon itself. Since Professor Giorgi had agreed to mentor me in this project, I asked him to reveal his own professional opinion on the one structure/two structure issue, and he shared his own apprehension of a single psychological structure. Validation of a single structure by an expert brought into play the importance of researcher credibility and discipline in the project. Admittedly, the laborious nature of the analytic process and my feelings of captivity in a lengthy project with no end in sight motivated my desire to “pull the rip cord” and accept two structures. In addition, such feelings had to be addressed because they could influence my ability to cultivate the phenomenological attitude necessary to continue the analysis. I prepared a list of criteria that I viewed as necessary to justify a two structure solution in this context. If two structures were to be created, they were to be well-grounded in evidence and justified by an explicit rationale. In essence, I was willing to seek my own solution, which could differ from Dr. Giorgi’s advice and/or be erroneous, so long as it was based upon solid argument. My faculty supervisor indicated his support of whatever position was taken.

I again consulted with Dr. Giorgi, my methodological supervisor, about the phenomenological procedures I was using. Given the previous experiential failures to generate a single structure, I felt that I was in a position to gain much-needed insight

about earlier decisions. For example, the outcome of the analysis from P2 had illustrated the difficulty associated with typifying descriptions using only one transcript. Although experienced phenomenologists may be able to abstract (i.e., generalize) with adequate skill under such conditions, as an inexperienced phenomenologist or learner I felt too disadvantaged in this regard. In addition, I learned that working with only two transcripts also led to “fault lines” in the analytic process. The use of two descriptive accounts is known to encourage a “polarized” apprehension of a phenomenon in the researcher (e.g., P1 has X, P2 doesn’t have X), and these differences tend to be asserted as essential features without sufficient imaginative variation. From a phenomenological perspective, it is the use of a third transcript that enables breaking out of these native mental tendencies, so that a higher level of generalization in a psychological structure can be achieved.

I decided in the late summer and early fall of 2013 to undertake one final attempt to generate a holistic psychological structure using the transcripts of all three participants. The approach sought to thoroughly consider, and make explicit any apparent issues that hindered the cultivation of a structure based on all three transcripts, and to use phenomenological procedures to determine if the content could be raised to a sufficiently high enough level to account for all of the variations. For example, one of the initial difficulties arose with the relationship between urgency and UI. I became aware of my personal view that urgency caused UI (i.e., an empiricist bias), and thus considered UI to be separate from the urgency experience

rather than a part of it. However, when this presumption was bracketed, I realized that the participants had told me in the interviews that UI was a part of the urgency experience, not apart from it. To successfully bracket, I renamed UI as “urine flow”, and then began exploring the temporal dimension in terms of when urine flow appeared to each P in each instance (if ever). This content was mapped visually. At the same time, urine flow was now considered to emerge in relation to other features (i.e., constituents), initially unnamed, that presented to the consciousness of experiencers either before or after the urine flow. Various constituents were created and then tested both in terms of content and when they emerged for participants (e.g., the *awareness of inefficacy to contain* constituent). The essential feature had to be considered in terms of whether or not it was able to adequately capture aspects described by all three participants (i.e., invariance across all instances and all P’s). Some were tested and discarded, others were tested and accepted, and others were tested and required slight modification. Lastly, it was noted that urgency experiences that emerged in public settings (i.e., social and professional contexts) held additional features not evident among those in private settings. Since all participants described at least one experience in a public setting, the process of identifying essential features was also undertaken for this content and the resulting data incorporated into the structure. The whole psychological structure was later tested for durability using the procedures described earlier (Chapter Four, Section III: Analytic Procedure).

My experience of creating a psychological structure from experiential data also highlighted the importance of collecting rich, diverse and elaborate accounts of a phenomenon. Details enhanced my ability to imagine the participant's situation as an actual variation of my own situation in the world and to be sensitive to the psychological aspects of the phenomenon. As well, more detailed instances liberated many phenomenal meanings during the explication stage. Effort was required during the interviewing stage to ensure that particular types of details were elicited; occasionally, participants offered explanations or interpretations about why urgency occurred, but re-direction brought the participants back on a descriptive track. Collectively, participants offered multiple and diverse instances of urgency. P1 was the only participant to describe an urgency episode in the presence of family members. P2's descriptions offered insight into the experience of urgency episodes in occupational settings and during physical activities (i.e., team and individual sport). P3's interview provided descriptions of urgency both in the home setting (day and night) and in leisure activities outside of the home. Thus, the phenomenon of urgency had been effectively sampled in diverse contexts.

#### *Growth as a Clinician-Scientist*

Soon after I entered the clinical program, I became aware that the implicit presumptions I had employed in past projects related to gastrointestinal physiology and clinical trials would be inadequate for my work as a clinician and researcher in

psychology. The presumptions themselves took time to become explicitly known, and were revealed slowly through participation in psychological research projects and clinical work. In addition, I encountered challenges associated with seeking to cultivate psychological perspectives about a condition that is generally considered “medical”. In this section, I describe some of these learning opportunities and how working in this project assisted with my development and growth as a professional psychologist.

One of the implicit presumptions involved an understanding of the “body as a machine” with “working parts”. For almost half of my previous career, the “body” had referred to an animal’s body, and its “parts” referred to reduced or isolated systems that were studied because of their fidelity to human physiology. For many years, I studied an intestinal neural pathway in an animal model of intestinal inflammation that had correlates to Crohn’s Disease in humans, and these views had served me well when working in a basic science environment. After switching to work in the field of clinical trials, my biological perspective remained intact despite an expansion of the subject matter. My view of the “body” now referred to the human body in terms of its material dimensions (e.g., organs, tissues, etc.), and the “working parts” referred to the isolation of physiological systems of interest (e.g., the urinary system). Health was conceptualized as the absence of biological disease.

At the same time, I reflected upon the complicated emotional reactions I encountered while working in the pharmaceutical industry. On several occasions, my

duties enabled me to see the kind of impact that my research activities had in the world. For example, on one occasion, I toured a research facility that had been contracted to complete a Phase I (pharmacokinetic) study to examine the environment in which the participants were being studied. As my boss proudly informed me that we had an opportunity to watch the subjects receive their first dose of study medication, I felt ill with the awareness that the people in this research environment bore similarities to the rats I had previously kept in cages. I wondered about the kind of conditions that motivated people to accept money to ingest experimental drugs while living in a restricted area for days, and worried about what I had become. What bothered me most was the double-standard that I had set in my life; that is, how I could be designing studies that I would personally never choose to participate in. It seemed as if my mechanistic views of “body as machine” had successfully separated me from others (i.e., relationally) and in ways that made me feel uncomfortable.

When it came time to design and conduct a dissertation project, I was reluctant to adopt a quantitative model due to fears that I would be trading one mechanistic view for another. For a period of time, I studied George Engel’s biopsychosocial model, but after presenting clinical cases grounded in these ideas during my oral comprehensive exam, I recognized this model did not adequately resolve the mechanistic bias in my work. The values of humanistic psychology continued to strongly resonate, and I began to seek alternative perspectives that could assist me to integrate my educational heritage into a broader framework that appreciated



personhood. Upon discovering Giorgi's (2009) empirical phenomenological psychology, I realized it offered not only a qualitative method, but an approach that enabled the kind of integration I so diligently sought. For example, Husserl's notion of embodied subjectivity presented a view of humans as an object for others (and thus, a biological entity), as well as an entity with intentional relationships with the self, others and the world (Giorgi, 2004). I had found a way to conceptualize personhood that facilitated internalization of my professional values whilst remaining faithful to my educational heritage.

The journey to understanding how to enact the phenomenological approach as a method for analysing descriptions entailed both challenges and experiential failures. My training and education in the biological sciences had prepared me to work with physical (material) objects, and involved visually-driven methodologies that required direct inspection or the assistance of instrumentation (e.g., a microscope). My decision to adopt a qualitative methodology meant that I would no longer be working with material objects, or even numbers, and as such, I wondered about how psychological phenomena would become "visible" for investigation. The phenomenological concepts of intentionality and consciousness afforded a means to understand the nature and constitution of psychological reality, and the necessity of shifting attention from real physical objects to noemata. Rather than learning how to use physical instruments or machines, what mattered now was the engagement of specific phenomenological attitudes and procedures while working with the situations

described by study participants. In addition, these ways of working necessitated opportunities to reflect on my own progress with the data.

Lastly, the vestiges of my implicit mechanistic view created challenges in terms of understanding the value of the qualitative research findings for others and how to translate this knowledge. Since biological studies were performed to create knowledge about how things worked (i.e., mechanistically), knowledge translation involved making explicit how the physiology of the animal model was similar to the human body. Clinical trials, on the other hand, sought to demonstrate the efficacy and safety of pharmaceutical agents, and ultimately, to persuade physicians to prescribe the product. What role or service did qualitative research in psychology serve? Now, the situation seems to be a bit more complex, given the opportunities for non-conventional ways to disseminate research findings (e.g., reports, DVD's, pamphlets), as well as the diversity of potential audiences (e.g., clinical psychologists, physicians, nurses, patients). Sandelowski, Trimble, Woodard, and Barroso (2006) have noted the increasing sense of dissatisfaction about disseminating qualitative findings using research reports, and the challenges and benefits associated with using arts-based transformations of evidence for a broad audience (i.e., DVD's). My own recent publication of a book afforded an entry-level experience of the issues and complexities in knowledge translation (Miceli, 2014). Since I enjoy writing and seek to continue writing for broader audiences, the next stages of my clinical practice will include exploration of these issues.

One of the most satisfying aspects of my journey has been the discovery of greater levels of human equality while working with study participants and clients. The internalization of humanistic and phenomenologically-based values has helped me to alleviate the feeling that I objectify others in order to conduct my work. An additional advantage, I believe, is that phenomenological perspectives seem to have relevance to therapeutic spaces. In therapy, clients do present with descriptions of their *life-world* situations that provide access to noemata (e.g., how objects are apprehended), and I have an interest in developing a better understanding of their utility in this setting.

One of the more challenging aspects of my work was related to the realization that psychological practitioners held a highly limited role in the assessment and treatment of continence in health settings. Despite evidence that psychological perspectives had been developed and applied to urinary dysfunction as early as the 1940s, the involvement of professional psychologists in this field declined as nurse-led behavioral modification treatments were introduced into health settings. These programs, which construe urgency UI in biological terms (i.e., as “bladder” training), fail to appreciate the human capacities and potentialities associated with the loss and recovery of urinary function. I have wondered about the extent to which this therapeutic context may constrain the way that OABS sufferers make sense of their experience and create viable roles for themselves in the world. With respect to my own professional development, I have often felt like I was “constantly swimming

upstream” to define a role for myself in a setting that was dominated by biological perspectives, and to recognize the impact of uncertain professional status and funding on my ability to work. These experiences have encouraged me to consider how other professionals perceive the value of psychology in healthcare settings, as well as to learn to identify when similar situations arise in the future, so that I may respond to them appropriately (e.g., seeking peer support from other psychologists).

## VI. Conclusion

Continence refers to the regulation and control of the excretion of urine from the bladder and is a vital part of human functioning. Over the last decade, diagnostic advances have brought about new perspectives on bladder storage disorders, including the introduction of Overactive Bladder Syndrome. Urinary urgency is the cardinal symptom of OABS and a target for medical intervention, which requires physicians and patients to discern this sensation from the other sensations related to bladder filling in everyday life (i.e., the normal urge to void). This task has proved to be both difficult and controversial. The aim in the present study was to clarify the phenomenon of urinary urgency in incontinent women diagnosed with OABS from a psychological perspective by determining its general features based on descriptions of how it was spontaneously lived (Giorgi, 2006*b*). Giorgi’s (2009) empirical phenomenological psychological approach and method was employed and revealed a

single psychological structure with eight constituents. The primary psychological feature was participants' sense of inefficacy to contain urine, and urgency was lived through in association with a concomitant urine flow (*flow urgency*) or sense of an imminent flow (*pre-flow urgency*). Participants' sense of inefficacy to contain urine evoked feelings of pressure to perform continence behaviors and uncertainty about whether they could be achieved satisfactorily. These structural features were congruent with the few descriptions of urinary urgency available in the literature, and may be useful for enhancing discussions between health care practitioners and patients, particularly when discriminating urgency from normal urge during consultations. These features may also be useful in raising awareness about the earlier stages of bladder-related illness in community-dwelling individuals. In the context of the literature on bladder storage disorders, the study findings supported a conception of urine containment as an embodied, generative capability that is influenced by one's sense of efficacy, or self-belief in that capability. Future research should continue to explore the utility of enhancing self-efficacy as a mechanism for therapeutic change in OABS sufferers. The strength of the present findings lie in their fidelity to how the experience appeared in the sufferer's *life-world*, but empirical studies are needed to determine the prevalence of these psychological features in males and females with OABS.

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## APPENDIX A: Research Ethics Approval



OFFICE OF  
RESEARCH  
ETHICS (ORE)  
309 York Lanes

4700 Keele St.  
Toronto ON  
Canada M3J 1P3  
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<b>Certificate #:</b>	<b>STU 2007 - 064</b>
<b>Approval Period:</b>	<b>05/17/07-05/17/08</b>

### Memo

To: Paula Miceli, Department of Psychology  
Paula\_m@yorku.ca

From: Alison M. Collins-Mrakas, Manager, Research Ethics

Date: **Thursday May 17<sup>th</sup>, 2007**

Re: **Ethics Approval**

When A Signal Becomes An Alarm: Towards An Understanding Of Urinary Urgency

I am writing to inform you that the Human Participants Review Sub-Committee has reviewed and approved the above project.

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: [acollins@yorku.ca](mailto:acollins@yorku.ca).

Yours sincerely,

Alison M. Collins-Mrakas M.Sc.  
Manager, Office of Research Ethics

## APPENDIX B: Patient Information and Consent Form



FACULTY OF HEALTH  
Psychology Department

209 Behavioural  
Science Bldg.  
4700 Keele St.  
Toronto ON  
Canada M3J 1P3  
Tel 416 736 5115  
Fax 416 736 5814  
www.psych.yorku.ca

**PROTOCOL:** *Towards an Understanding of Urinary Urgency*  
(Certificate Number: STU 2007 – 064)

**PRINCIPAL INVESTIGATOR:**  
Dr. Joel Katz, C. Psych., Dept. of Psychology, York University, 416-736-2100  
Ext 33125

**Collaborating Investigators:**

Dr.

Dr.

Paula Miceli, M.Sc., Ph.D. candidate, York University, 416-275-3735

You are being asked to take part in a research study. Before agreeing to take part in this study, it is important that you read and understand the following explanation of the proposed study procedures. The following information describes the purpose, procedures, benefits, discomforts, and risks associated with this study. It also describes your right to refuse to participate or to withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is known as the informed consent process. Please ask the study personnel to explain any words you don't understand before signing this consent form. Make sure all your questions have been answered to your satisfaction before signing this document. This research has been reviewed and approved by the Human Participants Review Committee at York University, within the context of York Senate Policy on Research Ethics.

**Purpose of Study**

You are being asked to participate in a research study designed to get an idea of what the experience of urinary urgency is like. To be eligible to participate, you will have been diagnosed by an urologist with Overactive Bladder, Urge Urinary Incontinence, or Mixed Incontinence. If you have received a diagnosis of Stress Incontinence, and experience severe urinary urgency, you may also be eligible to participate.

**Study Procedures**

Upon agreeing to participate in the study, we will arrange a suitable time and date to meet with you to conduct an interview. The interviewer will ask you to complete a short questionnaire asking for details about your personal and medical history (e.g., age, height, weight, and urinary symptoms), and to participate in a one-hour interview.

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During the interview, you will be asked to describe, in as much detail as possible, one or two situations in which you have experienced urinary urgency. Details might include: when and where you were, who you were with, what led up to the situation, what the experience of urinary urgency felt like, and your thoughts and feelings during the experience.

The total time commitment will be no longer than two (2) hours. Depending upon time and location, it may be possible for a member of the research team to conduct the interview at your home, or at a location that is more convenient for you (for example, a private room in the local public library). If you are interested in meeting at a location other than the clinic, please speak directly to a member of the research team prior to signing this consent form.

**Risks/Discomforts:**

There are no known physical harms associated with participation in this study. It is possible that through your participation in this study you may feel some concern about your responses to the questions.

**Benefits of the Research and Benefits to You:**

There are no personal benefits associated with participation in this study. You may be compensated for 2 hours of parking and will be asked to present a receipt to research staff. Your participation will enhance the understanding of the experience of urinary urgency among medical professionals and health psychologists. This information may increase the understanding of your medical condition and may assist with the careful planning of research projects to develop and test new treatments for bladder conditions.

**Confidentiality:**

No study records bearing your name will be collected. All data collected from this study will be coded using a unique study number. As a record of study participation, the signed patient information and consent form will be kept separate from the study records for a period of five years. During audiorecording of the interview, care will be taken to ensure that no personal identification will be recorded on the tape. Audiotapes will be transcribed by a professional transcriptionist within 6 months of recording and the tapes of the original interview will be destroyed immediately after transcription is complete. Study personnel will review medical records that pertain to your bladder condition, for verification of diagnosis.

All data collected from this study will be stored in a locked cabinet in a locked room at York University. When the results of this study are prepared for presentation or publication, they will be presented in a way that makes it impossible to identify

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individual participants (e.g., names or other specific information will not be revealed).

**Voluntary Participation:**

Your participation in this study is completely voluntary and you may choose to stop participating at any time. Your decision about whether or not to volunteer to participate in the study will not influence the nature of any ongoing relationship you may have with the researchers, study personnel, or medical staff.

**Questions about the Research:**

If you have general concerns related to this study, please contact the principal investigator, Dr. Joel Katz at 416-736-2100 Ext 33125. If you have questions regarding your rights as a research participant, you may contact the Office of Research Services, York Lanes, Room 309, York University, 4700 Keele Street, Toronto, 416-736-5914, who will assist you.

DECLARATION OF INFORMED CONSENT:

In no way does signing this consent form waive your legal rights nor does it relieve the investigators, sponsor or involved institution from their legal and professional responsibilities.

I have read this participant information and consent form and had the opportunity to discuss this study with \_\_\_\_\_, and have had all my questions regarding the study and my participation in it answered to my satisfaction.

I consent to take part in the study with the understanding that I may withdraw at any time without prejudice to my treatment.

A personal copy of this consent form has been offered to me, and by signing below, I agree to participate in this study.

Dated at the \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Participant's Name (printed)

\_\_\_\_\_  
Participant's signature

\_\_\_\_\_  
Name of Person administering this  
Consent (printed)

\_\_\_\_\_  
Signature of Person administering  
this consent



## APPENDIX C: Initial Telephone Contact Script for Medical Patients

### *When the Telephone was Answered:*

- Introduce self as a graduate student at York University who is working with Dr. Z<sup>41</sup> on a study of Overactive Bladder. Indicate that Dr. Z had passed along their name to me, and I'm calling to share information about the study, if they were interested to hear more. [Ask: Do you have a few minutes?]
- [If respondent indicates interest and time to hear more<sup>42</sup>]. Study participation takes less than 2 hours at Dr. Z's clinic. If you consent to participate, you will be asked to provide some information about themselves, including age and medical history, on a several short questionnaires. Then, you will participate in a 30-45 minute audiotaped interview. In the interview, I will ask you to recall an episode of urinary urgency and describe the situation in detail. It will be important to hear as much detail as possible, and as you are comfortable.
- Do you have any questions about the study? Is this something you might be interested in? [Interested? State days/times office is open for me to use. Ask respondent for present mailing address so as to send the patient information and consent form. Ask her to review consent prior to the scheduled visit.]

---

<sup>41</sup> The doctor's name is omitted to protect the privacy of the research participants.

<sup>42</sup> If the respondent indicated lack of interest, they were thanked for their time and the call was terminated. If the respondent indicated interest but lack of time, an attempt was made to schedule a telephone appointment that was convenient.

- The investigator's cellular phone number is also provided to the respondent, for use in cancellation, rescheduling or research-related inquiries.

*When Voicemail was Encountered:*

The following script was used to leave a message on voicemail.

“Hi. This message is for [*patients' name*]. My name is Paula Miceli and I am a Ph.D. student at York University. I am working with Dr. Z. and the Urology Resource Centre in [*city*] on a study of women who experience urinary urgency. The study involves a one-time, one and a half hour interview with me at Dr. Z's clinic. If you're interested to hear more about the study, please call me at XXX-XXX-XXXX. Thank you.”

## APPENDIX D: Participant Questionnaire

Participant Number:

Today's Date:

Date of Interview:

### PARTICIPANT QUESTIONNAIRE

*(to be completed by the participant)*

Age (indicate on line): \_\_\_\_\_

Height (approx)

\_\_\_\_\_ *Cm or feet/inches*

Weight (approx)

\_\_\_\_\_ *Kg or pounds*

Sex: (circle one)

Male

Female

Intersex

Gender (circle one):

Male

Female

Transgender

Relationship Status:

Living with Romantic Partner

Single

Married

Divorced

Widow

Widower

Other: \_\_\_\_\_

Biological or Step-children?

Yes

No

(Circle one)

If Yes, indicate ages on line: \_\_\_\_\_

How many, if any, reside with you? \_\_\_\_\_

Highest Grade Completed in School (list grade): \_\_\_\_\_

In which country (-ies?) \_\_\_\_\_

Sexual Orientation: (circle one)

Gay

Lesbian

Questioning

Bisexual

Heterosexual

Ethnicity: (circle one)

African Canadian

Latino (-a) Canadian

Multiracial

Asian Canadian

Native Canadian

Other: \_\_\_\_\_

European Canadian

Asian Canadian

Revised: July 26/07

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Participant Number:

Urinary Symptom Questionnaire

Please answer the following questions. If you are currently taking medications to treat your bladder symptoms, please answer the questions from a perspective of what your symptoms were like before taking the medication.

1. In your opinion, do you feel that you urinate too often during the day?
  - a. How many times per day do you urinate (approx)?
2. Over the last week, how many times did you typically get up to urinate from the time you went to bed at night until the time you got up in the morning?
3. Do you experience a sudden compelling desire to urinate which is difficult to put off? [Is there an intense feeling of urgency where you feel you must urinate immediately?]
  - a. If so, how many times per day do you have this experience?
4. How many times per day do you experience urine leakage?
5. Do you leak urine in connection with a sudden compelling desire to urinate (urgency)?
  - a. If so, how many times per day?
6. Do you leak urine in connection with sneezing, coughing, or when doing physical activities, such as exercising or lifting a heavy object?
  - a. If so, how many times per day?
7. Over the past month, when you urinated, how often have you stopped and started again several times?

Revised: July 26/07  
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Participant Number:

8. Over the past month, how often have you had to push or strain to begin urination?
9. Do you experience prolonged trickle or dribble at the end of your urine flow?
10. Over the past month, how often have you had a sensation of not emptying your bladder completely after you finish urinating?
  - a. At the end of urination (before rising from the toilet), do you push or strain to empty the bladder ? If so, how often?
11. Do you experience urine leakage almost immediately after you have finished urinating and walked away from the toilet?
  - a. If so, how often?
12. Have you ever received treatment for your bladder condition?
  - a. Please list all of the treatments you have tried in the space below. (include names of the medications, biofeedback, pelvic exercises and any other kind of treatments you have tried, for example, herbal or others).

Participant Number:

INTERVIEWER ASSISTED QUESTIONNAIRE

*(Completed with participant)*

1. Do you take any medications right now?
  - a. If so, what medications, and what are they for? (list medications reported by the patient, as well as those listed in the patient medical record).

<b>Medication</b>	<b>Indication</b>

2. Do you have any other medical conditions ?
  - a. If so, list these medical conditions in the table below. (list medical conditions reported by the patient, and medical conditions listed in the patient medical record).

<b>Medical Condition</b>	<b>Diagnosed When?</b>

## APPENDIX E: Raw Data

/ - designates meaning unit

As part of the process of removing identifying information, certain transcript text was altered or inserted and appears within square brackets [].

### Interview with P1 (Date: July 18, 2007)

**I.:** It is July the 18<sup>th</sup>, this appointment will begin at 2 p.m. and the participant's code is WL-02-01, that's WL-02-01. *[tape started after the question: Tell me about when urinary symptoms and what they were like when they started and what they are like now...]* **P1:** So many times these last three, four years, see I had all my muscles wrapped because they herniated. It was just one thing after another. I don't remember when it started. **I.:** You don't remember when you started. **P1:** No. / **I.:** How long ago was the hernia? **P1:** Hernia surgery? **I.:** Yeah, surgery. **P1:** It was August '05, I think. **I.:** So the hernia came about how? **P1:** It was an incisional hernia. **I.:** Oh, an incisional hernia. **P1:** Yes, this great huge muscle here. I mean they chop your muscle. I have so many incisions going this way and then going this way. And they chop your muscles all to you know what. / **I.:** And was the incisional hernia as a result of the bowel surgeries that you had? **P1:** Yeah. **I.:** Okay, so the bowel surgeries were in 2004 and then you had... **P1:** I think it was '03. **I.:** Oh, 2003. **P1:** But I will correct that to, I'll make sure you get the right date. **I.:** Sure, yeah, And then, so then as a result you have these incisions, this one incisional hernia, that was then I guess corrected with surgery? **P1:** Well, it was yeah. And there's another one apparently starting, another hernia. **I.:** Oh dear. **P1:** Which I'll have to get wrapped. / But I have constant abdominal pain, because the wrapping. I just went to see her in fact a couple of weeks back, the wrapping, they use a mesh and they wrap the muscle in it. And it hurts. I mean it rubs against other things and I'm stuck with this. Plus I have several adhesions. **I.:** Okay, yeah. **P1:** Other than that I'm just kitty-boo! *[laughs]* **I.:** Oh dear, it sounds painful. . / **P1:** Oh I've gained so much weight, that's what I don't like. I'm fifty pounds heavier now than when I started all this nonsense. Because I've had to recover and recuperate and recover again and recuperate again and so it's...I didn't have anything to do for three years but eat. *[laughs]* . / **I.:** Did you notice the urinary symptoms after the hernia surgery? **P1:** Oh, they were before that. **I.:** They were before. What were they like then? **P1:** Well, I don't think it happened like, just like that. I think it crept up on me and I don't know when it started really. **I.:** Okay. **P1:** Let's just say after the first surgery I guess. / I started to experience a wet sensation in my underwear, you know which can be a lot of things, you know. I didn't know what it was, but Dr. [NAME] examined me thoroughly for other causes and was just urine. / I just always have that odor of a wet baby, you know, baby needs a diaper change. I always had that odor and I hate it. / **I.:** And how wet were you for example, was it just your underwear or your pants, or? **P1:** No, just my underwear. I, yeah, I would change. I'm home now. I'm not working anymore. I used to

be looking after children when this all started. I was a caregiver when I left the business world. That's about all I could do really. It was great, but I can't do it anymore. I wish I could. / I wish they'd answer these phones. **I.:** Yeah, no one's here **P1:** That air conditioner isn't doing a thing for me, is it for you? **I.:** It's not, you know, it turned off somehow on its own and it's become stuffy in here again, let's see if we can get this back up. Maybe I'll set it at a higher setting, and maybe it'll, oh I set it on low, that's why. There we go. I have it at a higher setting it will cool off more and keep running. Although I'll, so the noise doesn't go on the tape, I'll just move that a bit. / **P1:** What's out there? Is that the waiting room? **I.:** Yeah, that's the waiting room. **P1:** Well this had to be the office, isn't it? **I.:** Oh, okay. **P1:** I don't think there's any, it seemed to me I sat right at the back and he was at the other wall. **I.:** Oh, maybe you sat right on the examining table. **P1:** No I was never examined. **I.:** No, eh? **P1:** Nope. / **I.:** Okay and so, can you describe for me how or if, you know, what the symptoms were like then over time after, so you described having the wetness in the panties, and then, in the bottom of your underwear, and then what happened next? **P1:** What happened next, what do you mean? **I.:** Well, in terms of, if, in terms of, you know, did you notice any changes after that, or is that sort of the way it is now? **P1:** It's still the same thing. **I.:** Still the way it is now. / **P1:** It's just constant cleansing and, I mean maybe I'm too fussy I don't know [laughs]. That's why I wonder if I'm going to be any help to you 'cause I'm kind of an irregular case. I haven't got a real pattern to this. **I.:** Okay, that's quite all right. My goal is just to hear what it's like for people. / **P1:** Well, what are you going to be out of this? I mean what is your goal, when you're through university, what are you? **I.:** By the time, at the time that I'm at the end of my program, and do some more exams, I'll eventually be a clinical psychologist. **P1:** A clinical psychologist. **I.:** Yeah, eventually, one day. Yeah, about three more years of training. / But my, the clinical work that I do is more so in mental health, but my research interests are in people who have bladder conditions. **P1:** Well why, what's the connection? **I.:** For me? **P1:** Yeah, why do you...? **I.:** Why am I interested? What's? **P1:** In bladders. **I.:** Oh, why am I interested in bladders, well the bladder is really, I find the bladder really complex, I find it really complex and that's one of the beauties of the bladder I find, but what happens I think is that it's so complex that there isn't a lot of description around the bladder and so part of what I'm hoping to do in this study, in listening to peoples descriptions, and what it's like for them, and what happens over time and if they notice changes is to get these descriptions down on paper, so then that way we can, as a medical community and a psychological community gain a better understanding of what the descriptions involved, right. So the idea is that, or at least for me is that if I know there's more to the story then I listen for more. / **P1:** Wouldn't more, being in the psychological field, wouldn't you get more out of another organ than the bladder? **I.:** [laughs] **P1:** I mean... **I.:** No! **P1:** No? **I.:** No, I find... **P1:** I'm fascinated now with the bowel and the way they operate. That's an amazing system we have in there, and people don't really, I mean I was appalled at how ignorant people are, like when I said I had a colostomy, you what? What's that? [sounds of disgust] But I just, I don't know, I just thought it was a very interesting procedure all the phases you go through. / **I.:** Yes, and the multi-step, you know there's a couple of different operations



and they take you through the different operations to help you heal, yeah. **P1:** Well, just the process of the bowel, ordinary, daily... **I.:** Oh, I get it. / **P1:** I mean it was fascinating to eat your supper and then go in and change the bag, I call it the appliance, and there's your supper again. It was a strange experience 'till I finally saw the fascination how that food had been processed, become. Especially with the ileostomy, 'cause that's even closer to where you swallowed it, you know that, 'cause my other, my colostomy was way down low, near the sigmoid, so it was a much less odorous area, but not nearly as interesting. / **I.:** Yeah, you got a more interesting look when you had the higher. **P1:** Well it was horribly painful and sore, but yeah it was more interesting. I used to disgust my family. [*laughs*] **I.:** [*laughs*] **P1:** Every time they eat corn on the cob, I still do. You know 'cause they all love corn on the cob and I don't. I will never eat corn on the cob again, never. Do you know why? 'Cause out it came just exactly the way it went in, so. / No, I just wondered how you connected, why you connected your psychological, I can't even say that properly, psychological studies to the bladder? **I.:** Yeah, well one of the things that is so great about studying psychology is that in studying psychology we learn a lot about what's called qualitative research, right, and qualitative research is the research that we're doing, which involves sitting down with someone, talking about their experience, you sharing your story, and those techniques of qualitative research allow me to talk to a number of people and then put together these descriptions. When you study in other types of areas, like medicine and biology which is where I originally studied, those kinds of studies are all just, they're really about data, right, so how often, what was it like, you know, rate your experience from one to five. So they take your experience and they put numbers on to it, and then you work with the numbers all the time. But for me doing all of the research with the numbers loses touch with people like you who go through this every day. / **P1:** Hm. **I.:** Yeah, so part of doing psychological research is really to engage with people who live it. You live with bladder symptoms every day, all day and have for quite some time and so that's what makes it interesting to be here with you. **P1:** Okay. There's no help for people is there? Like no, what do you call it, when you go to alcoholic's anonymous, there's no help groups for any of these things, is there? **I.:** I don't know of any support groups like that. / **P1:** See that's what people need, yeah, support groups. Like my husband needs support groups with his dialysis, that's a tough thing to live with. It's very tough and I needed it with the colostomy, I wanted to kill myself many a night when you wake up and your covered, the bag has broken, I mean it's hard to go through all that and there's...I fault this country for that, there's no support whatsoever. You get a VON nurse that's half asleep and grumpy because you hauled her out of bed, and that's about all there is. They're wonderful, I'm not faulting they're marvelous girls, but that's about all there is. So I don't understand why there isn't more support. / **I.:** With the bladder symptoms there's a lot of written kind of support available, like on the internet and for example, with the [NAME] centre, [NAME]'s got a lot of stuff written about the bladder that she, pamphlets and things like that, but there's not a lot of people getting together to talk about it. **P1:** Yeah, and I think that's an important thing. **I.:** Well, see and that's one of the benefits of psychology is that in doing studies like this, is that we can start to get on

paper you know, what people's distress is like and what it's about, and then start to put together things like support groups that might help people, you know, talk about it. **P1:** That would be great. I would love to part of that. / **I.:** Maybe in a few years there might be something along the lines. **P1:** Oh, hell I'll be dead by then.

**I.:** Oh dear. Not (?? inaudible) **P1:** Oh, I forgot to mention to you something else I had. I had a heart attack three days after the first operation. **I.:** Okay. **P1:** That's why I say I'll be dead... [laughs] **I.:** Oh dear. **P1:** I hope to get some weight off, get some exercising done. / **I.:** So, [SI], one of the things I was curious about hearing more about, now that we've talked about what your urinary symptoms are like, is, when we talked on the phone one of the things that I asked you to do was think about your past experience and find a situation where you've had some leakage or urgency and describe it in some detail about what happened to you. **P1:** Oh, I can do that. **I.:** Okay, so why don't we try that. **P1:** Have you got that thing on? **I.:** I think it's running. **P1:** Oh okay. **I.:** Okay, looks good. / **P1:** It was Christmas, I think I told you on the phone and I knew I wasn't going to make it to my daughter's home, my husband didn't know what to do and he said, well hang on, and he was going as fast as you can on the [NAME OF HIGHWAY] at Christmas. The highway was pretty busy. **I.:** So you were in a car at the time. / **P1:** Yeah, my problems always start in the car, like the urges. Of course at home, I'm in an apartment so, how far am I from the bathroom, eh? / **P1:** And I get out of the car, I started to cry 'cause I said, I can't hold it. He said 'just bring the door in', and I had my jeans on, and I peed right through them, everything, my shoes, everything. / And I went in the house and my son-in-law. I told him quickly what happened. He just put his arms around me and just lifted me up the stairs, "Come on Mom, Merry Christmas", made a big, 'cause the place, the place was full of teenage boys, and here I am wet, 'cause it was one large volume of pee [laughs]. **I.:** Oh. So the entire, because the tape won't be able to see. / **P1:** That was very embarrassing. **I.:** Yeah, so you were wet in the entire sort of groin area of your pants, all the way down to the bottom.

**P1:** All the way down. It was a good job I did. / **I.:** Oh yeah, yeah, yeah. So what was it like for you to enter the house when this happened? **P1:** Oh it was embarrassing. It was degrading, humiliating, and everybody, my daughter, my husband, son-in-law saying, 'you know mom, don't worry about it, it happens to everybody'. No, it happened to me, and that's what you worry about. I don't care about everybody else. They haven't got wet pants on Christmas Eve. I was feeling sorry for myself in a big way. It happened to me, you know. / But we got over it, thank god for my son-in-law. He was amazing. **I.:** So he wrapped his arms...? **P1:** He just wrapped his arm around me sort of, and sort of half, 'cause I couldn't go up stairs at that point, I wasn't supposed to, and the ground level door, there's steps up to the first level. So I had to take, he sort of always carried me up the stairs, boosted me, because I was fresh out of something, one operation, I guess the first one. And I couldn't, you know, maneuver the steps very well, and there's no hand railing at that point on those steps. / **I.:** So you had to go up...? **P1:** So nobody saw me. **I.:** Oh, okay. So you had to go up the stairs to get to the bathroom or to? **P1:** Oh, I had to go right through the house. **I.:** You had to go right through the house. [laughs]. **P1:** Yes. [laughs] the other end. **I.:** And pass the, and pass the room full of... **P1:** Kids.

Nobody, I mean I was flattering myself in thinking anybody would notice me. They never noticed a thing. Which, you know, how eighteen, nineteen year olds are. I just thought, I can't go in there with all those kids. **I.:** Oh yeah. / **P1:** But now we joke about it, the Christmas that Grammie peed herself, you know that's the funny thing now. **I.:** [laughs] Yeah. **P1:** That was my worst scenario. **I.:** And in hindsight and thinking about it, I mean, does it hold any other meaning for you? **P1:** In what way do you mean? **I.:** In any way, I mean now when you think back about it, you know, it was... **P1:** Yeah, the love of my family. **I.:** Yeah. / **P1:** The caring, they could have been embarrassed, you know, because there was, there were guests there aside from the teenagers. Yeah I just, it was very nice the way it was handled and kind of lightly joked about. I'm blessed really, I have a lovely family, I have three teenage, well they're not, one's a teenager now, the other two are beyond it. Twenty-five, twenty-two and fifteen. So I am blessed. No girls, not a girl. I'm going to keep them, because I really like them. **I.:** [laughs] They're keepers are they. **P1:** Yeah. The eldest is just the light of my life, he just, I don't know, I just light up when he walks in a room. / **I.:** So when, so I just want to revisit a moment in time in your story where you had gone in to the room and you'd been embraced by, it was your son you said? **P1:** My son-in-law. **I.:** Your son-in-law. **P1:** But he's my son as far as I'm concerned. **I.:** Yeah, yeah, and so what was it like at that moment that he embraced you? **P1:** Well he always embraces me, he's, his mom, his dad is dead now, but his mom lives in England and I'm his mom as far as he's concerned. He, many times he's told me, I mean much more to him than his, he doesn't like his own mother unfortunately. She's a bit of a bitch. But fortunately this notion (??inaudible) between us. **I.:** Yes, yes. / **P1:** So, he's always very loving with me. He hugs me a lot, and he'll do anything in the world for me. I don't know how I, I had a very unlucky life with men, but I sure got lucky with that one. I should have picked a husband as good as the son-in-law. However. Are you married? **I.:** I'm not. **P1:** Stay that way. **I.:** [laughs] Yeah. **P1:** Something I'd never do again. / **I.:** Was there any other reactions from other family members that night that you can...? **P1:** Not really, just my daughter, she got me all dry clothes and she just came to the rescue as she always does. It's just a wonderful feeling to be cared for that much. **I.:** You felt cared for when they were tending to... **P1:** Oh, yeah, I felt lucky that I peed my pants. **I.:** You did? **P1:** After, yeah I did, 'cause I got thinking, we were sitting around the tree and that, I'm a pretty lucky person. **I.:** Uhuh. / **P1:** And you hear so many people ripping in to their kids and their families and their relatives fighting over nothing. It's like kind of, I guess it's because I've almost died twice. Oh that's something else I had too, I forgot about it, I had, I almost died one night from, what is it you get, dehydration. We didn't know what it was, and my husband finally called the ambulance, and my, my pulse had stopped by the time they got me in the ambulance. That was close. **I.:** That's very serious. / **P1:** And I think it gives you a whole different outlook on life, you know, I'm not petty like I used to be. And I can't abide pettiness. You know there's so much going on in Canada and the United, especially the States, I follow the American news a lot. My Dad was an American and I'm very interested in their politics, I couldn't care less about Canada which is a bad, bad attitude. It's boring. But there's so many petty, stupid things going on, it's not worth it, it could go

just like that. **I:** Uhuh. So, it strikes me that your experiences, these near fatal experiences have sort of impacted... **P1:** Smartened me up. **I:** Yeah, it changed the way you think about things. / **P1:** Oh, definitely. The whole session since '03, I think it happened for a reason. I used to say, why God, why are you doing this to me? I just felt really sorry for myself when I lost a real close friend. I think that bothered me a great deal. I never saw her after the first surgery when the bowel perforated. I never saw her again, and it was SARS going on at that time, so was that '03 or '04. **I:** I think that's '03. **P1:** Yeah, well it was '03, and that's why... **I:** '03 to '04, actually it was that winter. **P1:** And people were staggered coming in to the hospital, like you could only have one person at a time I think it was, so I just kept wondering why aren't you coming, where are you? She never, I never heard from her again. / She wrote me a letter to say she was glad I decided to go on with my life. I'm not to this day sure what that means. But she had lost her husband and I had thought I had been a very good friend to her. / It disgusts a lot of people. You wouldn't believe how people react to a colostomy. A harmless little bag sitting there turns people right [*sound of disgust*] colostomy. Did they not know how the first one was developed? It's an interesting story, and I tried to tell a few people, but they didn't believe me. / **I:** And in comparison to the bowel, now you said you find the bowel a bit more interesting than the bladder. **P1:** I find it fascinating. **I:** Yeah. **P1:** It really is, I don't know how surgeons operate on it 'cause it's very hot and odory. Terrible odor. My doctor kids me about it now, but you know I was some kind of, you can see why they give you something like Citrimax or some kind of laxative to clean you out, because it's like working in a cesspool and I was an ungodly mess, you don't want to rupture... [*the tape is stopped*]

### **Interview with P2 (Date: August 24, 2007)**

**I:** So, the interview, the tape is now on and the interview has two parts to it. In the first part, which we'll start now, I'm curious to hear you describe your history of the urgency symptoms, so when, from your earliest memory of when they started and then sort of take me through like a bit of a history of how we got to be here today, and include things like treatments and just your experience of it and how it's affected you just over that timeframe. **P2:** Okay. My first memory of it would have been, ah, trying to think back... I think I, probably after, like, the third child was born. I don't, you know, other than when you're pregnant, you know, you have to go to the bathroom all the time. That would have been pretty normal stuff. I would think after the first child was born, then I, or after the third child was born, then I would have maybe been more aware that I can't hold as much, you know, I couldn't go as long. / And I'm trying to think if I've, there, for about I'd say, hmm, probably about 10, no longer than that, maybe about 15 years ago, I was aware that I was, you know, if I would cough or sneeze or whatever, there would be a little dribble coming out, and I thought, oh I hate that. So I started wearing the little day pads, you know the little thin ones, and probably, and wore those probably for six, eight years, regularly every day, just 'cause I didn't like the little stains in my panties and stuff

like that. / And so, wore those for a number of years and then found that I couldn't seem to find a type that was not irritating, so I was getting vaginal infections and you know, yeast infections and stuff and I thought, 'Well this is ridiculous', and so I just stopped doing that probably about three, four years ago. And you know, I do leak a bit as we discussed and do, there is, you know, a little bit of staining, which I don't like. But I have just decided that I, you know, I can bleach those pants or I can toss them out every once and a while and that. But, if I, and so, so really that's kind of been my experience of it. / It was getting more problematic as I was getting closer to the hysterectomy, so now it's what, sixteen years ago or sixteen, fifteen, fourteen, something like that. And when I had fibroids, I had very, a really large, apparently really large, fibroid in my uterus, which was pressing down, which was meaning I was having to go to the bathroom all the time, and having heavy periods and all that. / Well the gynecologist eventually said, 'You know, you need to have the fibroid out. You really do have to take it out', and said, 'If we do that, then while I'm in there', this is the gynecologist, 'While I'm in there, I'll do a bladder repair'. 'Cause I said, 'Well hey, why not fix up everything while you're in there? Do a bladder repair?' And he says, 'I can do, I will do', what they were calling at that time, or I recall him saying, would be a sort of a mini-version. In other words, I guess you can go in, or at that time, you could go in almost like a c[esarean]-section and do a whole what they call shoring up, you know a whole pulling up of everything. But he said, 'I won't do that.' 'Cause they were going, 'cause they did the hysterectomy vaginally, and so he said, but 'I'll do what I can do vaginally, I'll pull it up as much as I can'. / So when it was all over, he, I said, 'How'd it go?' And he said, 'Well I was able to do some. I think you'll find a little bit of relief, but probably not a lot, because I wasn't able to do a lot'. He said, 'You actually need to have that taken care of'. And so I said, 'Okay whatever'. And it didn't, I didn't see any perceivable difference then, so I've just kind of carried on since then. And it's been, pretty much, I would say the same, for, since then and now. You know, I don't know that it's gotten, I'm trying to think, the way I pee as we described, you know, it's not as fast, it's not as hard, there's some extra left when I stand up, there's all those sorts of things, that has all come in the last four, five years I guess, three, four years, but other than that, the actual how often would I dribble or something, if I sneeze or cough or something, I'd say that's been pretty constant I don't know that that's getting any worse, it's been pretty constant. / What has actually, interestingly enough, made me think more about it in the last few years is thinking, 'Okay I'm fifty-eight, if I need to have surgery at this, it's probably a good idea if I do it now'. My mom who, as you know I was just on the phone with, she's eighty-three and she actually has quite an issue with it and has to wear a...She's on her own and all that and does fine with everything, but she does have to wear a regular full pad and change it a couple of times a day. So she's got quite a problem and she has said, 'You know, gee I wished I'd have taken care of this a long time ago' and so it's, so what prompted me to go to the doctor then was that I thought, 'well, I should get this looked at, you know I should figure this out, if I need the surgery, do it now'. / And he kind of said, 'No you don't really, or you're not bad enough, or whatever, and you know, 'let's just try medication first'. If medication doesn't work, then let's think about surgery'. / Somewhere between

seeing Dr. [NAME OF UROLOGIST] and seeing my gynecologist, the suggestion was made that I really, really, get serious about these Kegels, which I've only half way done off and on in my life, and I thought, okay fine. This medication is not working. I'm going to really give these Kegels a try, and so I now do them pretty regularly every day. They've made enough of a difference that, is it still an issue? Yes, it is. Will I still consider surgery? Yeah, probably. / But it's the urgency of all, the considering of all, that has backed off some because it's now better than it was. Like I said, I'm able to play sports. I'm able to run. I'm able to do all those things, however, if I know I'm going to go out and play sports, you know, if I'm going to go golfing or I'm going to work hard... Like we just moved and so there was a lot of boxes, and up and down stairs and all that. I wore pads on those days, just so in case I was straining or whatever. And I'm sure they, I'm sure I needed to. I don't normally now. I don't wear a day pad. I don't all that... but if I know I'm going to be in that situation, then I will. **I.:** As a sort of prophylactic, so, a preventative measure. **P2:** Exactly. **I.:** Yes, yes. **P2:** Exactly. / **I.:** So, and when you were experiencing a few leaks you said, you said that it was just enough to soil the panty. **P2:** Yeah, I would. Well one thing is I, because I take a lot of vitamins, there's a lot of B vitamin in my urine. So my urine is bright yellow. You know my urine is really yellow. So, if you get even a drop on your panties, it stains. **I.:** Oh, I see. **P2:** You know, so, it's like, 'Oh crap'. It's not like I'm flooding or anything. It's not even that perception of wetness. There might be a sense of dampness, but not really wetness. And it would be more that, if there's even one or two little dribbles, it's going to stain. / **I.:** Oh I see, I see, yes. So the volume, the volume of the loss has not been sufficient to stain, let's say, the clothes you were wearing that day? **P2:** Oh no, no, no, no, no. It's never gone that far. It would all get caught with just the little... I wear the little cotton liner, you know, the little panties that are cotton in the crotch part and so yeah, it would never get past there. **I.:** Okay, so it really is just a few drops. **P2:** Yeah. **I.:** But, enough to stain as you were saying. **P2:** Yeah, enough to stain. / But again, having said that, if I was like out in the yard working hard in the garden and suddenly sneezed, now there would be enough of a little, especially if I hadn't gone to the bathroom for an hour or so, there would be enough that yeah, it would wet my panties. And there have been times when I have had to come in and change my shorts because it was that situation. I'm out, I haven't peed in a while, suddenly I cough or something and there's enough to come out. That's probably happened I'd say, to that degree, probably only four or five times in the last few years. But it has happened. / **I.:** Um-hmm, Um-hmm. And I'm curious about if you could take me through a "normal day"... I guess in terms of drinking and peeing and just how you sort of organize everything and of course, describing some of your bladder habits I guess. **P2:** Okay. Well, mostly I work at home. I do training and consulting and speaking and stuff like that, and so I have a home office, so I'm either at home or I'm getting all dressed up ready to go out to go speak or train somewhere. So those are kind of two very different days, so we'll take the at-home day first. **I.:** Okay. / **P2:** I would get up around 7, 7:30. I would go out for a walk. As I say, it takes me about thirty-five minutes, it's got you know, maybe five to ten minutes of that is running or jogging, but the rest of it is walking as I fast as can. So I would go out and do that. I

would get up, go to the bathroom. I would drink maybe like half a cup of water, just to kind of brush my teeth and stuff, go out for my walk, come back, and on my walk try to kind of finish, I take a bottle of water with me, so by the time I'm done, I would be finishing that bottle of water. And so, then I'd have breakfast and probably then, by the time I had breakfast, have a shower and get ready to kind of plop in front of the computer, I'd go to the bathroom again. And somewhere in there, either that first time or second time would actually have a bowel movement, generally speaking. So I'm in front of the computer, usually I'm good, so let's say that's now 8:30, 9 o'clock. I would go to the bathroom again, probably around 10, 10:30 and then be good until about 11, 11:30. Then, I always get up and go in, around 11, 11:30 and have a, have my little break and on my break I'll pour myself a diet Coke or something. And so, I haven't drank too much more from breakfast to the diet Coke although I do have a glass of water always on my desk, but more for sipping than anything. So then I would drink the diet Coke somewhere between 11:30 and 12, 12:30 and then again go to the bathroom again, come out here have lunch, in which I would drink maybe some water, maybe some milk or something like that. I would probably walk around, put some laundry on, that kind of thing, for lunch, you know. After I have lunch and then I would probably pee again and then sit back down in front of the computer... go until maybe 2, yeah 2, 2:30. Again, get up, go to the bathroom, walk around you know, get a drink, you know, walk outside... just to kind of clear my head and all that. Go back, in plop in front of the computer again, and probably pee again between, you know, around 4ish. I just kind of work until my husband gets home, so sometimes that 5:30, sometimes it's 6:30 whatever... so somewhere between 4 and 6:30, 7, I would go again at some point. And then, when he comes home generally we sit outside, so I would go again just before I go outside, have dinner, probably go, maybe once, maybe twice more in the evening and then always right before I go to bed. And, then usually I go to bed at like 11 and I usually kind of lay there and take a while to go to sleep. / And if I take more than just a few minutes to go to sleep, then I get up to go pee, not because I really feel like I have to so much, but because I know I'm about to fall asleep and I don't want to, I'm going to try not to wake up in the night, so I'll go pee maybe at 11:30, 12 o'clock. **I.:** So kind of trying to fit one in before the long night of sleep hopefully. **P2:** Right. /

**I.:** Okay, and for your day of consulting? **P2:** Okay, if I'm a day out and so I have to be sort of on the road by the morning, get up, same idea, have breakfast, I don't go for the walk, so have breakfast and everything, doll all up like you have to, do the hair the whole nine yards [*laughter*]. And then try not to drink much because I know it's going to take me an hour, hour and half, the weather who knows, to get from where I'm at to downtown [NAME OF CITY] wherever I'm going, which is always like usually an hour, two hours, three hours or whatever. And that's really when it's been a problem because even if I don't drink hardly anything when I, if I get on the road at like 7:30 or 8 o'clock and you know it's an hour and a half, two hours before I get in to [NAME OF CITY], I am dying by the time I get there. / Like I really, that's when it's the most disturbing for me. It's because I'm on the freeway, and if you get stuck in traffic and the whole thing, and I'm a deadline, got to get there, got to get there, kind of thing. You get there and of course

you're in this, you know...you're going to an office building and there's no bathroom...you've got to go and ask, 'Oh sorry can I...?' So that is really, I would almost do anything to get away from that. / What happens at home, fine. If I have to go every hour, that's fine. But it's all that, it used to be, and it's not so much again now, because you know in the last while because of the Kegels. But I'd say for several years there, I'd go in to a meeting, I would pee right before I go in to a meeting, and meetings generally are a least an hour, hour and a half before anybody feels the need to get up and go do anything and I would be just dying after forty-five minutes. And knowing that this meeting, you know I have to be there, I'm supposed to be, it's not over, people aren't leaving, you know, just waiting, hoping somebody says, 'Oh well let's stand up and take a bio-break and then we'll get back to this kind of thing'. / I've often excused myself from meetings or left workshops or whatever, not when I'm doing them, but when somebody else is doing them, because of having to go to the bathroom and slip back in. These days it's not quite so much. I'm usually pretty good now about being able to, so the whole day will go like that. If I'm doing the workshop, then whenever we break, you know, you usually break every couple of hours for a workshop. I will go to the bathroom every time I break. Just so I don't have to be worried about it. / And then the same thing, I'm good, but I'm always worried on my way home, you know you get stuck in [NAME OF CITY] traffic, and you're there for three and a half hours and that's, you know, that could be not good. / **I.:** And just curious about the experience of being in traffic... when you're actually sitting in traffic and it's been an hour and half, so you're approaching the time that you'd like to void or maybe past the time that you'd like to void. What's it like, what does it feel like for you?

**P2:** Well, there's been times.... I'll give you the most extreme example, is there was one time, there was one of those snowstorms, left [NAME OF CITY] at 5, it was now like 8:30 on the road, and so I had been on the road forever, and was just dying, you know, just thought, 'okay, this is ridiculous', we're going like five miles an hour, snow blowing everywhere, you know, couldn't see the car in front of you and all that, and I'm just dying, having to go, and exits are too far in between, you know you couldn't even get off, and I thought, 'Well I don't know what I'm going do. This is crazy.' / And I thought, no, no, no, you know, keep telling, 'Oh you can make it, you can make it', and I thought, 'No I can't make it. This is ridiculous.' So I actually pulled off to the side of the shoulder. I got out of my car, walked around the front of the car, opened up the passenger side door and squatted in front of the passenger side door, 'cause I figured, okay, the people behind won't be able to see, they'll just see the door and the people on the other side there was too much of a storm anyway and just squatted and went to the bathroom, because I just, otherwise I was going to bust.

**I.:** Okay, okay. / **P2:** So, that is real distressing, is to be in traffic and it's, you know, it can be embarrassing when you have to go to the bathroom when nobody else has to, but if you cannot get to the bathroom that's really distressing. /

**I.:** Uhuh, uhuh, yes, yes. Thank you. So actually, that's fabulous. Thank you so much for describing your normal day in both forms, because they're very different, the consulting day and home day, the working-at-home day. Now, just to shift to the second part of the



interview, I'm wondering now, if you could call to mind a situation where you've had an extreme amount of urinary urgency, and I'm interested to hear in as much detail as you feel comfortable sort of taking me through what that event was like for you? **P2:** Okay, well I'll you the most, and it's almost laughable. I mean, when I got home from it and told my sister we just roared. **I:** Really. **P2:** About how ridiculous this is...but I had been, this is probably about three, four years ago, and I had taken up running. I was running like 4 or 5K four or five times a week. And it was like, 'Yeah, this is really cool'. / And I went away on vacation with my husband down to his hometown in New Brunswick, and they had a, and his brother is a runner, his brother is a marathon runner, and I was saying, 'Oh yeah, I'm running, blah, blah, blah'. And he said, 'Well, you know', he said, '...there's a 5K run this weekend, why don't we do it?' And I thought, 'Yeah, no problem, this will be great'. And so we got all ready and everything and we're out there. Well, I've never, I had only run on my own. I had never run in any kind of race, so I was asking him, you know, 'what do you do', 'how do you prepare' and all that. He said, 'Don't wear yourself out, but just trot around a little bit get nice and warmed up and all that stuff', and he said, 'oh', and he said, 'Drink plenty of water'. He said, 'Because it's going to be hot, and you'll, and they'll have water along the way, but you've got to drink plenty of water'. Well I was just never even thought about that, and I thought, 'okay, yeah, yeah', so I guzzled down two full bottles of water before the thing started. / So they said, 'Okay, all right get ready, set', you know, we're all, 'go'. We're all lined up there and I started running, trotting, you know running and it started leaking out and just, I mean, pouring out. Like I'd never experienced anything like that ever. / And it just, I could feel it and I thought, 'Oh no, oh no, oh no' and we're at the beginning of the race and there are cars all around and there are people cheering and the streets are lined with people and they're all watching us and I've got this cute, little short outfit on and the whole thing, and I can feel it just flooding, just flooding down my pant, I can feel it coming down my leg, I can feel it just like flooding. It was just the worst, if it wasn't just so crazy, it would be just like this biggest nightmare of my life. / Fortunately I don't know anybody in that town, but it was just, I thought 'Oh my God, oh my God, what am I going to do!' And I had no choice, by the time I realized the seriousness of what was happening, we were on a bridge going from one section to another, so there was no turning back, there was no like stopping and saying, 'Oh sorry I can't do this', there's no bathroom in sight anyway, because we started in the middle of a park and we were running over a bridge, so it's not like I could have said, 'Oh here, I'll just go to the bathroom'. Just flooded all down my legs, all down the back of my shorts, like I was just, it was as if somebody had squirted me. It was horrible. I just thought nothing worse could happen in the world. / Anyway, got across the bridge and started coming in to this other section and I could see that there was a gas station up ahead and, how did it go? I see that there was a gas station, but again, once we got in to that place, there was people standing all around. And there's like, 'Yeah!' / And I thought, 'Well I can't stop', you know, my husband is clicking pictures and the whole thing, and I said, 'Okay my only saving grace is it's blistering hot out here' and people are.....there's water, they've got water all around, and so I went by the first water thing I could, and took it and just threw

it all over me. So that I, water everywhere, so that it looked like I was just drenched in water. But, the truth of it, I was drenched in pee, just drenched. / And it just kept coming; it was almost like when it started there was just no stopping it. It was a very interesting thing, 'cause that had never happened, you know, to me, and there was just no stopping it, period. **I.:** So it was just flowing as you were running?

**P2:** It was flowing as I was running, not dribbling or drabbling, flowing as I was running and it just continued to until it was, I guess, all out. So, by the time I had gone, you went two and half and then turned around the other two and a half, by the time was coming up the other two and a half, it was almost dry. So, I don't know how I smelled at the moment, but you couldn't really see it by the time I got into the finish line and the awards and the whole nine yards. I don't know that anybody ever noticed. You know, my husband never said anything, but it was just unbelievable. I thought, 'Oh, well, this is going to be America's funniest stories'. So that was the most extreme experience I've ever had with urinating. / **I.:** Yes, yes. And was there a sense of urgency at all before the flow started at the beginning of the race, did you have any sensation there? **P2:** Well, no, ... / and you know, I was guzzling this water you know, and everyone's trotting around and stretching and everything, and I thought, 'Okay I better go to the bathroom, I better make sure'. So, I went to the bathroom like three times before we got ready. But of course all that water hadn't quite made it through yet. I think was the problem. Because we had, I don't know, whatever a half an hour to warm up, and so I think the water just hadn't made it through. So, I'd go to the bathroom, there wouldn't be much there and I'd think, 'Okay no, I'm good, I'm good'. And then as soon as I started running, like a half a block and it was just flooding. **I.:** Oh my goodness. / **P2:** So it was just like, 'Oh, great'. **I.:** Yes. So down your leg, sort of in to your socks and shoes and...? **P2:** Oh yeah, completely, just washed in it. **I.:** [laughs] **P2:** It was just horrible, it was just laughable, it really was, had it not been so embarrassing. Fortunately, had that been my own hometown, I don't know what I'd have done, but I didn't know a soul. /

**I.:** Yes, yes, any other thoughts or feelings? You've mentioned embarrassment, I mean there are some thoughts that it sort of doesn't matter because you don't know anyone there, sort of anonymous, but anything else? Did you think of anything else at the time?

**P2:** Well, I was ticked off. I was just mad. I thought 'this is ridiculous'. This is my big chance to, you know. I actually won. **I.:** [laughs] **P2:** [laughs] I won in my age category, you know, which is old, but yeah. So I thought well, this is crazy, you know. This never happens to me at home. So, I guess, in terms of emotions I was surprised, 'Hey this never happens to me at home' and just ticked off. Like, jeesh. You know, 'can't even run'. And this was pre-doing all the Kegels and stuff, so it was.... I don't know if it would happen today. I suspect it still would be a problem guzzling down two full bottles of water right before you're ready to run. /

**I.:** Yes, yes. And I'm wondering what this event, what meaning this event had for you? I guess sort of over the long term, what sort of personal meaning you derived from it? **P2:** [laughs] Well, it means life sucks, I think...No, I think it's, I have a pretty good attitude I think in life about a lot of things, and at the moment, of course, it was really distressing, and I thought 'Oh, this is embarrassing', this is, you know, 'What am I going to do?' I

think, for me what it meant was, or what I took from it was, I probably really need to do something about this. Because at the time I was really committed to running and I thought I'm going to run, if I'm going to continue to do this, you know, I need to take care of that. So I just saw it as, you know, an impetus to say, get this handled. / **I.:** Uh-uh. And what happened next in terms of after the run?

**P2:** Well, that's when I, I think I mentioned it to the, well I didn't tell him what happened, but I said to the, to my gynecologist you know, I've got to figure this thing out, this is not okay. And he said 'All right, well send you off to the specialist' and all that. So it wasn't long before I was seeing Dr. [NAME OF UROLOGIST] and everything. / **I.:** And up until that time, before the running event happened, you hadn't had an experience like that before? **P2:** No, no. I mean I'd had experiences where, I have played baseball on women's teams for many years and at that time. Let's see that would have been, yeah, I would probably had just kind of come to the end of playing baseball in the summer. And on baseball, whenever it was baseball night, I always wore a pad, because I know if I were running from one base to the next or running to get a ball, I would definitely, definitely squirt out then. 'Cause in those situations you're just running for all your worth. It's not jogging, like I can jog and it's not a problem, but when you're flat out running it would squirt. So I was probably for five or six years there playing in the summertime on the baseball team wearing a pad every time I played. And there was a couple of times, because I was coming right from work, and blah, blah, blah and didn't have a pad and it was a big problem. It was a problem in that I basically trotted from base to base. **I.:** Oh, okay.

**P2:** Yeah, I just, I knew that if I just ran flat out it'd be a problem. **I.:** Oh, okay. So actually you ran a bit slower knowing because of the squirt? **P2:** Yes, yes. /

**I.:** Okay. Well that's thank you very much, that's very helpful, is there anything else that you'd like to add to the story? **P2:** No, I think those stories can be just, other than like I said, I just, I was mortified at the moment and, but thought, you know what, this going to make a great story. [laughs] **I.:** [laughs] **P2:** Telling the people that I'm willing to share it with, like my sister and stuff, it is a great story. You know, it just shows you how ridiculous things can get sometimes. **I.:** Uh-uh, uh-uh, yeah, yeah. Oh my goodness. And also how much humor you can derive from it. **P2:** Oh well, because you just have to laugh at something like that. I mean what are you going to do. **I.:** What a great attitude, what a great attitude [NAME OF P2]. **P2:** Well. / **I.:** I'm wondering for the great portion of the interview we've talked a lot about the experiences that you've had in more sort of the social environment and the home environment, I'm wondering if there's an experience in the work environment that you wouldn't mind describing? **P2:** Well, let me think, I think the things that stand out for me in terms of work are the, are that problem of getting to and getting from, the idea that if it's more than about an hour, that can mean I have to stop. I can tell you where every bathroom is this side of the Mississippi, because I've staked them out. I truly know where all of them are, because you know, I just had to know. So yeah, to me that's just kind of just an overriding nuisance, the idea that oh, you know, I can't just, let's go! You know, 'cause I've got to know where the bathrooms are. / I think with, in terms of workshops or training or whatever, there's always plenty

of time for me to go to the bathroom, you know, 'cause you're in a hotel or you're in an office building. I mean there's always plenty of time to go, but it's, / I think it's the, and this is probably tied in with my age too. Because I'm fifty-eight, so I'm nearing the end of my career. I'm speaking most of the time and training most of the time, thirty-year-olds, and I'm aware of the age difference. I'm aware of the need to keep up and be current and all that. And for me, this need to be slipping out, going to the bathroom all the time feels old-ladyish, you know? It's like, 'Oh yeah, right. I'm really cool, I'm really hip, I'm really with it, except excuse me every fifteen minutes while I go pee'. / You know, so I think for me it's, image would be too strong a word 'cause I suspect no one ever sees or cares. It's all my issue, but I put it in a category of kind of, well, debilitating is too strong a word, but an issue in terms of trying to be as effective as I'd like to be in my work life. You know, so again, you're in the meeting, things are getting very important, important stuff is being talked about, you need to be listening, and all I can think about is going to the bathroom. You know, so it creates distraction in that sense, yeah, I would say that's the, the big, the long and short of it. / **I.:** Yes, yes. Is there an experience in the work environment that you can call to mind where you had a considerable amount of urinary urgency? **P2:** Well, not any one particular one, but the scenario of 'Got up in the morning, got on the freeway, it's now two hours because it was supposed to be an hour trip, there was an accident, blah, blah, blah it's, you're now really, really desperate and pulling, and you're late. So, it's not like you have all the time in the world, you're supposed to be there in five minutes, you have got to go to the bathroom, and the dilemma or the toss up, do I find a gas station and stop and go to the bathroom and now I'm fifteen minutes late, or do I forge on, get to this office where I'm supposed to be, say, 'Oh hi, I'm [NAME OF P2], where's your bathroom?' You know which do you do, neither is a good option, / I've actually called ahead a few times, you know, probably three or four and said, 'I'm on my way, I'm running a little bit late, I should be there in about ten or fifteen', to buy me time to stop and go to the bathroom. So it's the truth I am running late, late because I have to pee all the time, but it's, you know, it's just, yeah I would say that's more of a consistent on-going theme. / **I.:** And in terms of the second option that you mentioned, or sort of the second scenario where actually walk in, you've delayed the bathroom, even though you're running late, you've delayed stopping to go to the bathroom in favor of trying to be on time, and then introduce yourself and say, 'Hi I'm [NAME OF P2], where's your bathroom?' What's that like? **P2:** It kind of depends on where you're going. I mean... I work in lots of different industries. If I'm going into a hospital or a social work setting, mostly that's middle-aged women. They have no, you know it's like, 'Oh yeah it's down the hall, take your time, the meeting starts later.' If you're with IBM, or you know, and you're working with all the suits, you know, it's the boardroom and it's the suits and it's men, that to me is much more troubling. Then I do feel like the old lady who's got to stop and pee, because everyone knows none of those men have peed since they were twelve. **I.:** [laughs] **P2:** You know it's like, oh it's like my mother, she has to go pee all the time, or at least I assume that's what they're thinking. So yeah, that's much more problematic if it's men, if I'm encountering a group that's all men. / I try to take a humorous approach. You know,

I'll just say, 'Oh, can I visit the little girls room 'cause I've been on the freeway forever?' You know, and just kind of make light of it. But still, it's just annoying. It's annoying when all the thirty-two year old women just walk right past you in to the meeting. And they also were on the freeway. We all arrived at the same time, same accident, same freeway, I've got to go to the bathroom and they don't. **I.:** Yes, yes. And so, and you know that those women will be able to sit there for another three hours without any complaints or... **P2:** Oh of course, and have coffee while they're sitting there. / That's the other thing, it's like oh would you like some coffee or water? Oh 'no thanks', and meanwhile, I'm parched and dry, but you don't dare drink while you're doing all this, so. Yeah. **I.:** Is that the part of it where it's a bit of a nuisance too? **P2:** Well it is a nuisance, / I find it a nuisance that way on trips. I mean, I love nothing better than to be in my car, with my diet Pepsi and the music blaring and off down the road. But if I'm sipping on my diet Pepsi, that means I'm going to have to stop about every forty-five minutes to an hour. Well, it takes you a while to get somewhere if you've got to keep stopping. So on trips, now if I'm with myself, I'm like yeah, 'whatever', I'll just stop. If it's with my husband, well then you've got to negotiate those stops, so it's even more problematic. But, yeah I find it, in traveling, a pain in the butt. **I.:** Yes, yes, yes, well thank you, that concludes the end of the interview [NAME OF P2].

### **Interview with P3 (Date: November 23, 2007)**

**I.:** Today is November 23<sup>rd</sup>. I'll be meeting with WL-02-09 at 10:30. [*the tape is stopped*] **I.:** But, no problem, excellent, so actually just to begin the interview, I'm wondering if you can describe from your earliest memory of your urgency and incontinence symptoms? **P3:** I guess I felt the dropping, the bladder dropping. I could feel it, that was my main concern and then the incontinence, that I had to go, like especially at night. I get up two or three times at night to go to the washroom. / So, that's why I had something done, that's why I had the operation, hopefully thinking that it would cure what I had. And she was, the doctor, was not just too sure whether it would or not, but she said to try it. And it didn't, it didn't help. **I.:** So you felt a sensation like your bladder was lower in the body? **P3:** Yes, oh yes. I could feel, I could feel it, is it the bladder or something, I could feel it. In the vagina, I could feel it yes. So that's why I had something, you know, so I think something had to be done, should be done. **I.:** And at that time you went to see a urologist at...? **P3:** Yes, Dr. [NAME1], who's a urologist. I went to my own doctor and my own doctor suggested Dr. [NAME1]. / **I.:** Okay, okay. And, did they mention what that was at the time? Did they give you a name for it or? **P3:** Yeah, it's apparently very common, a very common occurrence that, this urgency to urinate and that, and especially at my age, it's very common. So, I didn't hear about it, but now I have. [*laughs*] **I.:** Now you have, yeah [*laughs*] **P3:** Gosh. / **I.:** And what was your urgency like then, at the time that you first noticed the symptom that your bladder had dropped? **P3:** That I had to go more often and sometimes, in fact, I

wear pads now because I never know. / Sometimes I get up and I have to go so badly that I didn't get to the washroom. I don't have time to get to the washroom, so I wear a pad all the time now. Umm, only as I say because, sometimes the urgency is so great that I can't get, and I don't have that far to go to the washroom at home, but even when I'm out sometimes its, / and the thing is too that I can't control it as much as I used to be able to, you know if you have to go to the washroom. / And I was a teacher and somebody was telling me that maybe that's why, because I couldn't go all the time, I had to hold it for so long. / I don't know, I have no idea. **I.:** That somehow that the symptoms that you have now are connected to those years that you held... **P3:** Yes, and I was teaching upstairs and you can't leave the classroom, you know, by yourself if I had to, so you have to keep it, you have to hold on to it until you get out, downstairs. / **I.:** And what do you think? Did that make some sense to you? **P3:** It made some sense, but thinking back I, but who knows, who knows at that time? Maybe I held it back, but not even thinking about it, not even thinking about it. **I.:** So it wasn't something you did consciously? **P3:** No. **I.:** To hold the bladder when you were teaching? **P3:** No, not that I can remember, and I've been retired for a few years [*laughs*]. I took early retirement too. So I don't know. I have no idea, but apparently it is very common, and especially in women my age or whatever. / **I.:** How often as a teacher would you have been able to use the facilities? **P3:** Well, the thing is, that I, well unless I was out, which wasn't, you know outside with the kids, I could. Like I mean 'cause you start school and then there was recess, and which I probably didn't go because I was doing something in that, and then lunchtime. So I probably went at lunch, at least once there, and then after school. **I.:** Okay. **P3:** So, but whether I consciously held back or not, I can't remember. I can't remember. / **I.:** And so approximately when, a couple of years ago, or five years ago, when did you notice the symptom of your bladder dropping and the urgency? **P3:** Ah, let's see, about three years ago, three, four, three and a half, four years. That the bladder, well something dropped, and then the urgency to go. / **I.:** And were you at that time when you first noticed the symptom were you, when you had the urgency, were you already beginning to experience leakage or did that happen a little later? **P3:** No, right away. **I.:** Right away. **P3:** Yep, yep, it seemed to, that I can recall, it seemed to be right away like that I, I couldn't get up from the couch and the washroom was not that far away at home. Because I live in a townhouse, so it wasn't that far away and I, you know sometimes I made it and sometimes I didn't. Most of the time I didn't. / **I.:** The, I'm wondering if you could, I know we talked about it just a bit before the tape started, but can you tell me what happened with the treatment that you received with Dr. [NAME1]? **P3:** I went in for a day surgery to put a sling in, and she wasn't too enthusiastic about it, about doing it, but I wanted it done because I thought that would help, / and when she doing this she also cut my, just a little bit, my bladder. So I was in the hospital for three days I think afterwards because of that, because she wanted to make sure that there was no leakage. / And then when I got home I took, I can't seem to remember whether it was all right for the first little while or right away, I had to stand to urinate. I can't, that I can't put my fingers on tight away, you know whether it was a

little while later or right away. But I, right now, I have to stand. **I:** You have to stand to urinate. **P3:** Yes. / And this, you know it's all over [*laughs*], it's not very nice.

**I:** Because the urine goes all over... **P3:** Oh all over... **I:** Over the toilet...

**P3:** Yes, the toilet and everything and sometimes the floor and you know. It depends on where the position of the urinal, it depends. So, you know, if it's fine, I'm all right, if it's not, it just goes all over. **I:** Yeah. / **P3:** So that's, so as I said, I have to go back to Dr. [NAME1] and see. She thinks maybe a complete operation, whatever is concerned, I can't remember what she said, might help my problem.

**I:** So like an abdominal, opening up the abdomen and putting a sling in that way?

**P3:** Exactly, yes that way, yeah, rather than the other way. I don't know. We'll have to see when I talk to Dr. [NAME1], and see whether it's worth it or not

**I:** Uhuh, uhuh. So you have some decisions to make, it sounds like. **P3:** That's right, that's right. / **I:** Just, I'm just looking over the symptom questionnaire, do you have any...you don't. I was just going to ask if you had any leakage of urine associated with sneezing or coughing? **P3:** No, I don't, I don't, that's funny, because a lot of people have, my doctor asked me that and I don't. / It's just urgency, when I have to go, I have to go right now. **I:** So as soon as you have the sensation it's almost already too late?

**P3:** Too late, yes. / And then sometimes when I'm getting up, like if I'm sitting down watching television or something, I get up and it just flows, just for a few minutes and then I, and then sometimes when I go to the washroom I, I go, and sometimes I won't. That's what's frustrating because I leak a little bit and then when I go to the washroom, nothing, nothing happens. **I:** Nothing comes out. / **P3:** Now Dr. [NAME1] also said to me, I can not go on demand. If I had to go to the washroom, I can't do that. **I:** Uhuh, no, what happens? **P3:** Nothing. **I:** Oh okay, okay. **P3:** I can't do it because I know, because sometimes, because I went a, once she suggested a little bit, maybe, you know, a few drops and that, and nothing, and my bladder was full, and yet I could not go, 'cause she said to me, do you have to go to the washroom? I can't do it on demand for some reason, whether it has to do with way back, going way back. I have no idea.

**I:** Okay, It's just not agreeing with you. **P3:** Nothing agrees with me as far as that's concerned. Nothing, honestly. **I:** Doctor asks and you say, well I'll have to catch you later. [*laughs*]. **P3:** [*laughs*] Yeah / **P3:** and apparently I do have quite a few bladder infections, but I don't feel anything, **I:** Okay. **P3:** like passing urine or I mean, I think, I know that it's not sore, it's not nothing, , **I:** Um-hmm. **P3:** but I know I went once and she was, 'you've got a bladder infection'. Oh. I mean I didn't feel anything, nothing. / **I:** Okay. And did you get some treatment for the infection? **P3:** Yes, I got treatment for the infection. / **I:** Yeah. And even with the treatment did you notice any change in the urgency at all? No eh? Hm. **P3:** Nothing. / **I:** A silent infection. **P3:** Yeah, yeah. Silent. **I:** A silent infection, yeah. / **I:** Hmm. I'm wondering [WL-02-09], if you could take me back in time to an experience where, and we talked about this on the phone, a particular experience that you wanted to share with me that you had urgency and incontinence and we'll just talk about that for a little bit. **P3:** The only thing I can say in regards to that is when I'm sitting and watching television, or just sitting or whatever doing something, whatever, and I get up and I flow, like maybe, just a second or two

seconds. And so I think, well I have to go to the washroom, / but as I say, I always wear a pad so you know that, I never used to, but I do now because of that reason / and then I go to the washroom and nothing happens. **I:** Nothing happens. **P3:** Nothing happens. And then maybe half an hour later, then I have to go, then I go. But right then, when the flow, nothing happens. / And that's very frustrating too because you think you've done a little bit so, you know, I mean, there must be some more. **I:** You would expect, you expected some more. **P3:** Yes, some more, but nothing happens.

**I:** And nothing happens when you get to the washroom? **P3:** No, the majority of the time nothing happens. And it's most frustrating that part. / **I:** Uhuh, uhuh, and can you, what aspect of it is frustrating, 'cause you expect something to be there?

**P3:** Yes, yes. And then the thing is like maybe fifteen minutes later I have to go again, and then I go. So why couldn't I go at that time when...? That's what's frustrating, the time limit, the time frame I guess. / **I:** And is it frustrating the fact that you've had to make sort of two trips or more? **P3:** Yes. **I:** Kind of... /

**P3:** And the thing is like, especially in the wintertime, you know, you're doing... **I:** Take all your clothes off... **P3:** And I wear, clothes off, clothes off, it's frustrating to no end. **I:** [laughs] Yeah. **P3:** So I know, under here... a friend of mine, she's a little Chinese girl, she's pregnant now and they were over, she brought her mother here, 'cause she's pregnant so, anyway so her mother and her wear these.... **I:** Oh, like long johns!

**P3:** Long john's, like long john's and I never do. I never did, but she does and so does her mother. Her mother doesn't speak English at all, so anyway she speaks better English so she said 'Why don't you get something? Like it's too cold, you have to keep your legs warm'. Oh, so I said 'okay. So I said I'll go and see if I can get some, I don't know where, but I'll...' So anyway they, I live up in [CITY1] across from [NAME OF MALL] and so she went there and she phoned me back and I was... And she says, 'are you home?' I said, 'yes'. 'Can we come over?' I said, 'you were just over', I said 'sure'. So she bought me two pair. **I:** Oh!

**P3:** And so I've been wearing them and so, as you say, take this off, I take that off and my girdle and the pad, and like it's, it's most frustrating you know to have to do all this. / And then sometimes at night when I have to get up, I get up more often, maybe because I don't go during the day as often, maybe I should, the doctor suggested I do, I sit on the toilet, but I can't sit on the toilet every two hours at least. / When I go at nighttime, sometimes, again it's very, the urgency is there, sometimes, not always, but sometimes. So, you know, it's not good. It's not good. / **I:** And what happens during the night? **P3:** It wakes me up. **I:** It wakes you up. **P3:** Yep, and then I think, 'why am I awake?' And then I go, 'oh I have to go the washroom'. / And as I say, sometimes the urgency, the most I've slept is three hours, and it seems like from three to six, those, that, those hours I seem to be able to sleep. I sleep three hours before that, like I go to bed around 11:30 maybe 12, and I go to the washroom before I go to bed, and at one o'clock I get up and I go, maybe two o'clock again, and then maybe not two, but maybe three then I go, then I'll sleep until six. **I:** Uhuh. **P3:** And then after that, you know it's seven o'clock, eight o'clock and almost every hour on the hour. **I:** Almost every hour. /

**P3:** And I find that I, my throat and my mouth gets very dry. And I have to get my son to



put the dehumidifier on in the house. So I have to have something to drink, so I, sometimes I don't drink I just wash my mouth out with water or something like this. / And it doesn't seem to matter what, I don't drink sometimes, I do drink a lot, or maybe two or three gulps you know, and sometimes I just wash my mouth out and this and that, I still get up. **I.:** You still have to get up? **P3:** I still have to get up, it doesn't matter, so. **I.:** So changing your fluid intake you haven't found any really... **P3:** No, no. **I.:** You know, any impact on how many times you have to go? That sounds frustrating also. **P3:** That is, it's yeah, I never thought that something like this would be so frustrating, but it is, / and especially now that I have to stand up, that's really bad. Because now I have sciatica in this one leg, and I'm going to the chiropractor, she's trying to do something, but sometimes it's very hard for me and again, the washroom was right there at night, it's not that far to go, but sometimes the leg hurts so badly that I can barely, that I can barely walk, so to get to the washroom even the few steps I have to take...it's hard. It's hard. But hopefully this will go away, the sciatica will go away, / but I still have to go, whether I have anything wrong with me or not, or, the urgency at night especially is... / **I.:** So your urgency is different in the day vs. the night? **P3:** Yes, yes. / **I.:** How is it different? **P3:** I guess, during the day when I stand up sometimes I urinate, you know like, but at nighttime, it seems not all the time, that maybe once and a while I'll leak. Maybe if I, if it doesn't wake me up in time, that I really, and the urgency is there, but most of the time it's not. / But then a couple of nights ago almost every time I got up, the urgency was there and yet last night, it wasn't so, you can never tell when its there or not. / **I.:** And so when you wake up and you don't have the urgency, do you still go to the toilet? **P3:** I still go. **I.:** You still go. **P3:** Oh yes, I think, oh yes, 'why am I up?' And then I, so that must mean that I have to go the washroom, so that's why I go anyway. **I.:** You go anyway, yeah. / **P3:** Sometimes I kind of lay around, like 'why am I up?' You know. And then the urgency is there, so then I have to go. / **I.:** And what's it been like for you to be out in social situations? **P3:** Well because I have the pad, so, most of the time if I go shopping or anything there's washrooms, I know where the washrooms are in all places, so I have to be sure. But other times, because as I say, I wear the pads so if I leak or anything, it's no problem. / **I.:** Has there ever been a time when the pad hasn't contained all of the urine? **P3:** Yes. / **I.:** Can you tell me about that experience? **P3:** A couple of times, only because the washroom wasn't close enough or something like this, that I leaked right through the pad and everything. **I.:** And on to your clothing? **P3:** Clothing yeah, and this is why I wear black all the time because I'm always afraid, because black won't show and black, you know black skirt or black pants or black something. But not that often, that it's happened, but maybe since the operation, since May, maybe twice, three times at the most that it's happened. / **I.:** Do you remember in particular where you were at one time when it happened? **P3:** Yes, I remember I was in the casino [*laughs*]. **I.:** A casino? **P3:** Yes. **I.:** Like Casino [NAME2]? **P3:** Yes. But this was [NAME3], 'cause that's closer. **I.:** Oh [NAME3]. **P3:** [NAME3], that's where I was and I don't know why, all of a sudden by the time I get to the washroom, it's not that big, but by the time I got there, it was late. So that's, and the other time... **I.:** So there was that much urine? **P3:** Yeah. **I.:** Okay.

**P3:** Yes, yes, there was that much. **I.:** And it just started when you were at one of the...?  
**P3:** Yeah, one of the machines and by the time I got everything done and got to the washroom, it was late. / I'm trying to think of the other time when the same thing happened. And I think I was, you see when I'm sitting down it's not bad. **I.:** The urgency? **P3:** The urgency is not there. **I.:** Uhuh. **P3:** But when I stand up, that's the worst part. The urgency's there. / Sometimes I have, like in the car, if I'm in the car and I, and ah, wherever I am and I get up, out of the car and the urgency's there, I go a little bit, you know, a little bit, and then I, wherever I am, I go to the washroom and sometimes I can't, so this is why I have to wear the pad all the time because I'm never sure of what's going to happen. **I.:** Yeah, I understand. / And so when you were in the casino that time and the pad was sort of slowly overflowing by the time that you got to the restroom? **P3:** Yes. **I.:** And then what happened after that, after, you sort of cleaned up, I guess? **P3:** Cleaned up, and the pad I had to throw away because it was full, so I just put paper / and then I went home. **I.:** So you left. **P3:** So I left, because what else can you do? There's nothing that you can do. / **I.:** Do you tend to carry pads with you? **P3:** Yes, sometimes I do, depends on where I'm going, yeah, I would carry an extra pad. But that hasn't happened that often because, number one I'm not, I don't go out that far away from the washroom at the mall or shopping or this, the washrooms are right there so I can always go. **I.:** Yeah. / **P3:** So this hasn't happened that often, maybe as I say, maybe two times, maybe three times at the most, but I think even twice, I think, its only happened really that it was so bad that so... / whether I left, whether I could go right away when I wanted to, when I had to, or what it is I have no idea, I don't remember, but it was... **I.:** And it just happened. **P3:** It just happened. **I.:** It just happened. **P3:** Thanks goodness, not too often, but it happens, but... / **I.:** Well that, it sounds as if., ... 'cause those, actually what kind of pad do you wear? **P3:** A Tena. **I.:** A Tena? **P3:** Yeah. / **I.:** It sounds like there was a large volume in your bladder that just started to... **P3:** Yes, yes, it just started. **I.:** To come out. **P3:** That's right, that's right, and there's no... once it starts, there's really no stopping until, you know, after a while it will stop by itself or I'll, but, / and there's sometimes when I go at night, not so much during the day, but at nighttime, you know I'll go to the washroom for a long time and then maybe at the end I'll push down and that, and a little bit dribbles and a little bit more and then there's nothing. There's nothing. **I.:** Uhuh, uhuh, so you would want to sort of check that it's empty. **P3:** Yes, definitely because I don't want to get up again. / And how many times I have done that, I've gotten in to bed and I think, 'oh no, I've got some more and I get up again' and I go and go some more. **I.:** You do, you do? **P3:** Yeah, and I dribble again. So, you know, it's really stressful. **I.:** Yeah... **P3:** It's really stressful. / **I.:** And the day that you were at the casino how did you leave it? Were you there with friends, I mean? **P3:** I was there with a friend. **I.:** Yeah? **P3:** Yeah. **I.:** Yeah, uhuh. **P3:** You know we just left. **I.:** You both left? **P3:** We both left. **I.:** You both left, yeah, yeah, yeah. **P3:** Yeah, we both left. **I.:** Did you share what happened to you with her? **P3:** Yeah, I told her. Oh yeah, she knows, she knows. **I.:** Yeah. **P3:** That I have a problem. She has problems, not those ones. [laughs] **I.:** Not the urine, not the bladder

ones [laughs]. **P3:** No. **I:** Other ones.... **P3:** Other problems, yeah. **I:** Yeah, yeah. / **P3:** In fact she lives here in [CITY2], this is why, and her birthday was yesterday and you know how the weather was yesterday. **I:** Yes. **P3:** There's no way I was going to go anywhere, so I said I'll take here out today for lunch. **I:** Ah! **P3:** So this is why I'm, this is why it was a good idea to come here and get it right away. **I:** Yeah, yeah. **P3:** So she was, actually she lives on [NAME OF STREET IN CITY2]. **I:** Uhuh, not far from here. **P3:** Not far from here. **I:** Yeah, yeah. / **P3:** But as I say I'm just hoping that Dr. [NAME1] will be able to do something for this (??inaudible) I have no idea. And I phoned her once for an appointment and there was no answer, actually an answering machine and I'm, she'll probably phone me today and I'm not home naturally. [laughs] **I:** [laughs] **P3:** I called her the other day, and I don't think she works every, I don't know if she's there every day. Her secretary must have gone or something, but she'll probably call me today, and ask, 'where are you?' **I:** The day that you're not there to take the call. **P3:** The one day, that's right. That's right. / **I:** I'm just wondering [WL-02-09], the last question is, I'm wondering about what meaning this having incontinence and the urgency has held for you personally? **P3:** It's very uncomfortable and especially, not during the day, it's not so bad, the pads, I guess this is why I'm not playing it up so much, but at nighttime when I have to get up three or four times at night, that's really, for me, because sometimes I can't fall asleep again, / and I have to go and get a drink, and I have to have warm milk and I have to, you know, the doctor gave me some kind of pills that I take if I can't sleep. I can't get back, usually I can get right back to sleep, but not always. Sometimes I don't and it's frustrating, especially at nighttime it seems to me. At nighttime. To get up so. And when you didn't before and then all of a sudden, so yeah that makes it's frustrating. **I:** I understand. So that's the end of the interview. [the tape is stopped]

## APPENDIX F: Data Analysis

### *Analysis of P1's Transcript*

Units denoted by \* reflect content contributed in part by Dr. Amedeo Giorgi as he demonstrated application of the model.

<b>P1's Verbatim Transcript Separated Into Meaning Units (P1=Participant #1; I=Interviewer)</b>	<b>Transformed Meaning Units (Psychologically Sensitive Expressions Highlighting Relevant Psychological Sensitivity to Phenomenon)</b>	<b>Second Transformed Meaning Units (To Further Enhance Psychological Sensitivity to Phenomenon)</b>
<p>1. <b>I:</b> It is July the 18<sup>th</sup>, this appointment will begin at 2 p.m. and the participant's code is WL-02-01, that's WL-02-01.  <i>[tape started after the question: Tell me about when urinary symptoms and what they were like when they started and what they are like now...]</i>  <b>P1:</b> So many times these last three, four years, see I had all my muscles wrapped because they herniated. It was just one thing after another. I don't remember when it started. <b>Q:</b> You don't remember when you started. <b>P1:</b> No.</p>	<p>1. In response to I.'s question about when P1's urinary symptoms began, P1 states that she has had many surgeries in the last three or four years. Pointing to her abdomen, P1 recalls that she underwent surgery to support and contain the abdominal muscles that had started to protrude through the weakened areas of the abdominal wall. P1 was irritated by the persistent discomfort and distress with these medical problems, and she doesn't remember when her urinary symptoms started.</p>	<p>1. Amidst a painful, multi-year course of medical (surgical) treatment, P1 was uncertain about when her urinary symptoms appeared.</p>
<p>2. <b>I:</b> How long ago was the hernia?  <b>P1:</b> Hernia surgery? <b>I:</b> Yeah, surgery. <b>P1:</b> It was August '05, I think.  <b>I:</b> So the hernia came about how? <b>P1:</b> It was an incisional hernia.  <b>I:</b> Oh, an incisional hernia.  <b>P1:</b> Yes, this great huge muscle here. I mean they chop your muscle. I have so many incisions going this way and then going this way. And they chop your muscles all to you know what.</p>	<p>2. In response to I.'s requests for more information regarding when the hernia developed, P1 stated that the hernia happened around 2005. It originated from the multiple surgical incisions that were made across the large abdominal muscle, which P1 demonstrated with her hands, leaving it disfigured and weakened.</p>	<p>2. One consequence of P1's multiple abdominal surgeries was a visibly disfigured and weakened abdominal wall.</p>
<p>3. <b>I:</b> And was the incisional hernia as a result of the bowel surgeries that you had?  <b>P1:</b> Yeah.  <b>I:</b> Okay, so the bowel surgeries were in 2004 and then you had...  <b>P1:</b> I think it was '03. <b>I:</b> Oh, 2003. <b>P1:</b> But I will correct that to, I'll make sure you get the right date.  <b>I:</b> Sure, yeah, And then, so then as a result you have these incisions, this one incisional hernia, that was then I guess corrected with surgery?  <b>P1:</b> Well, it was yeah. And there's another one apparently starting, another hernia. <b>I:</b> Oh dear.</p>	<p>3. In response to I's query, P1 states that her incisional hernias followed a series of surgeries for an intestinal problem in 2003. P1 endured a lengthy recovery period with the intestinal problems, and then underwent surgery to repair the abdominal hernia after that. P1 is frustrated by the recent appearance of another hernia on her abdomen that will require another surgery to repair it.</p>	<p>3. P1 underwent a series of surgeries to treat intestinal problems, as well as to repair her abdominal wall that had weakened as a result. P1 is aware of recent weakening in her abdominal wall, and frustrated about the need for another surgery to repair it.</p>

<p><b>P1:</b> Which I'll have to get wrapped.</p>		
<p>4. But I have constant abdominal pain, because the wrapping. I just went to see her in fact a couple of weeks back, the wrapping, they use a mesh and they wrap the muscle in it. And it hurts. I mean it rubs against other things and I'm stuck with this. Plus I have several adhesions.  <b>I.:</b> Okay, yeah.  <b>P1:</b> Other than that I'm just kitty-boo!  <i>[laughs]</i>  <b>I.:</b> Oh dear, it sounds painful.</p>	<p>4. P1 has constant abdominal pain from the mesh already embedded in her muscle in earlier surgeries to fix the hernia. The mesh rubs against other internal organs, which is very painful. The pain is also made worse by the presence of intestinal adhesions. P1 feels trapped by her need to have the embedded mesh to treat the hernia but which causes unremitting pain. With sarcasm, P1 expresses that she is fine other than her ongoing medical problems, which draws the attention of I. to P1's complex health problems and continuous pain.</p>	<p>4. For P1, the embedded material that strengthens her abdominal wall is also a source of unremitting pain. P1 feels unable to effect any improvement in her pain.</p>
<p>5. <b>P1:</b> Oh I've gained so much weight, that's what I don't like. I'm fifty pounds heavier now than when I started all this nonsense. Because I've had to recover and recuperate and recover again and recuperate again and so it's...I didn't have anything to do for three years but eat.  <i>[laughs]</i></p>	<p>5. P1 stated that she has gained a great deal of weight since she had her intestinal surgeries three years ago, and she is unhappy about it. She states that her efforts to address her health problems in the last few years have included a series of surgeries with lengthy periods of rest and recuperation. With self-deprecating humor, P1 adds that her medical condition had left her unable to do much physically except eat food, which contributed to her weight gain.</p>	<p>5. P1's non-urinary health problems required a lengthy and sedentary recuperation, which she believes contributed to an increase in body weight. P1 disapproves of her present body weight/shape.</p>
<p>6. <b>I.:</b> Did you notice the urinary symptoms after the hernia surgery? <b>P1:</b> Oh, they were before that.  <b>I.:</b> They were before. What were they like then?  <b>P1:</b> Well, I don't think it happened like, just like that. I think it crept up on me and I don't know when it started really.  <b>I.:</b> Okay. <b>P1:</b> Let's just say after the first surgery I guess.</p>	<p>6. When asked by I. whether the urinary symptoms began after the hernia surgery, P1 responds that they began before that. P1 stated that the urinary symptoms "crept up on her" and that she really did not know when they started. P1 implies that there may have been an awareness of their slow emergence but could not offer a definitive date when they began. P1 speculated that they began after her first surgery.</p>	<p>6. P1 had an awareness that her urinary symptoms gradually emerged during the past few years, and began sometime after her first surgery.</p>
<p>7. I started to experience a wet sensation in my underwear, you know which can be a lot of things, you know. I didn't know what it was, but Dr. [NAME] examined me thoroughly for other causes and was just urine.</p>	<p>7. In terms of the onset of her urinary symptoms, P1 first became aware of a wet sensation in her underwear. She was uncertain about what the wetness was, and thought it could be many things. P1 was thoroughly examined by her doctor who informed her that the wetness in her underwear was urine.</p>	<p>7. The onset of P1's urinary symptoms began with an awareness of a wet sensation in her underwear, which was later identified as urine by a medical professional.</p>

<p>8. I just always have that odor of a wet baby, you know, baby needs a diaper change. I always had that odor and I hate it.</p>	<p>8. P1 states that she constantly has an odor of urine about her, like the odor of a baby with a urine-soaked diaper that needs to be changed. The odor is abhorrent for P1.</p>	<p>8. P1 is aware of a constant odor of urine about her, which she abhors.</p>
<p>9. <b>I:</b> And how wet were you for example, was it just your underwear or your pants, or? <b>P1:</b> No, just my underwear. I, yeah, I would change. I'm home now. I'm not working anymore. I used to be looking after children when this all started. I was a caregiver when I left the business world. That's about all I could do really. It was great, but I can't do it anymore. I wish I could.</p>	<p>9. In response to I.'s question about the amount of wetness noticeable on her clothing, P1 states that the urine soaks into her underwear only, which she is able to change at home now after they become wet. P1 stated that she used to work as a child caregiver after leaving the business world, but then developed health problems. She was only able to find work in child care, which she really enjoyed and would like to continue to do, but her health problems prevent her from returning to work.</p>	<p>9. The wetness experienced by P1 is limited to a concealed garment (underwear) that she is able to change promptly in the privacy of her home. She did not describe any "urgency" associated with these leakage episodes. P1 is frustrated by the health problems that prevent her from returning to a job that she enjoyed.</p>
<p>10. I wish they'd answer these phones. <b>I:</b> Yeah, no one's here. <b>P1:</b> That air conditioner isn't doing a thing for me, is it for you? <b>I:</b> It's not, you know, it turned off somehow on its own and it's become stuffy in here again, let's see if we can get this back up. Maybe I'll set it at a higher setting, and maybe it'll, oh I set it on low, that's why. There we go. I have it at a higher setting it will cool off more and keep running. Although I'll, so the noise doesn't go on the tape, I'll just move that a bit.</p>	<p>10. P1 expresses frustration about the constant ringing of the phones that remain unanswered in the vacant office where the interview is taking place. P1 also informs I. that she feels warm. I. states she too is warm, and that the air conditioner has turned off. I. stated that she would increase the air conditioning to a higher setting to have more continuous cooling in the room, as the unit had been set on low resulting in irregular cooling. Concerned about the noise of the air conditioning unit on the tape recording, I. states that she will move the tape recorder closer to the interviewee.</p>	<p>10. P1 expresses irritation about the environmental conditions in the room where the interview is taking place.</p>
<p>11. <b>P1:</b> What's out there? Is that the waiting room? <b>I:</b> Yeah, that's the waiting room. <b>P1:</b> Well this had to be the office, isn't it? <b>I:</b> Oh, okay. <b>P1:</b> I don't think there's any, it seemed to me I sat right at the back and he was at the other wall. <b>I:</b> Oh, maybe you sat right on the examining table. <b>P1:</b> No I was never examined. <b>I:</b> No, eh? <b>P1:</b> Nope.</p>	<p>11. P1 expressed some doubt about attending the clinic years ago, and inquired about the identity of adjacent rooms. She wondered whether the room where she was being interviewed for the study was the location where she met with the doctor when she attended the clinic. Prior to the start of tape recording, P1 expressed annoyance about not being physically examined by the doctor during her last visit to the clinic. She re-iterates her irritation as she tries to recall her location in the clinic during her last visit.</p>	<p>11. P1 recalled a past visit to the urology clinic where the study interview took place. P1 expressed annoyance about the lack of serious consideration she received for her urinary problem.</p>

<p>12. <b>I.:</b> Okay and so, can you describe for me how or if, you know, what the symptoms were like then over time after, so you described having the wetness in the panties, and then, in the bottom of your underwear, and then what happened next?  <b>P1:</b> What happened next, what do you mean?  <b>I.:</b> Well, in terms of, if, in terms of, you know, did you notice any changes after that, or is that sort of the way it is now?  <b>P1:</b> It's still the same thing.  <b>I.:</b> Still the way it is now.</p>	<p>12. In response to I.'s question about whether P.'s urinary symptoms changed over time, P1 stated that in terms of her awareness, the urinary problems are the same for P1</p>	<p>12. The urine leakage experienced by P1 has not changed since it first began.</p>
<p>13. <b>P1:</b> It's just constant cleansing and, I mean maybe I'm too fussy I don't know [laughs]. That's why I wonder if I'm going to be any help to you 'cause I'm kind of an irregular case. I haven't got a real pattern to this.  <b>I.:</b> Okay, that's quite all right. My goal is just to hear what it's like for people.</p>	<p>13. P1 states that the urine loss requires constant cleansing and cleaning. Feeling some embarrassment, P1 expresses doubt about the medical significance of her urine leakage as a symptom, and wonders whether she might be more meticulous than other people about the urine leakage and clean herself more often than other people would. P1 expressed that she would like to be helpful to I. but doubts whether she will be. P1 believes that other people probably have a pattern to it but she does not have a pattern to her urinary symptoms. I. reassures P1 of her interest in hearing what these symptoms are like for all people.</p>	<p>13. P1 doubted the medical significance of her urine leakage, and was embarrassed in asserting her problem might originate from a personal need for better hygiene relative to others. P1 was not aware of any pattern to her urine leakage and doubted that she would be of help in the study.</p>
<p>14. <b>P1:</b> Well, what are you going to be out of this? I mean what is your goal, when you're through university, what are you?  <b>I.:</b> By the time, at the time that I'm at the end of my program, and do some more exams, I'll eventually be a clinical psychologist.  <b>P1:</b> A clinical psychologist.  <b>I.:</b> Yeah, eventually, one day. Yeah, about three more years of training.</p>	<p>14. P1 requests I. to share information about how this interview will help her to meet her goals and what those goals are. I. shares that she is training to be a clinical psychologist.</p>	<p>14. P1 expressed interest in knowing what I. will achieve by conducting interviews with women who have urinary urgency and incontinence.</p>
<p>15. But my, the clinical work that I do is more so in mental health, but my research interests are in people who have bladder conditions.  <b>P1:</b> Well why, what's the connection? <b>I.:</b> For me?  <b>P1:</b> Yeah, why do you...?  <b>I.:</b> Why am I interested? What's? <b>P1:</b> In bladders.  <b>I.:</b> Oh, why am I interested in bladders, well the bladder is really, I find the</p>	<p>15. In response to I.'s statement that she studies mental health and bladder conditions, P1 asks I. about why she is interested in the bladder. I. states that the bladder is complex and there is little attention to how people describe their bladder problems. I. shares with P1 that she has an interest in listening to people's stories about their bladder and hopes to use these stories to increase understanding amongst</p>	<p>15. P1 does not appreciate a connection between bladder conditions and mental health, and requests more information. I. describes her interest in the bladder.</p>

<p>bladder really complex, I find it really complex and that's one of the beauties of the bladder I find, but what happens I think is that it's so complex that there isn't a lot of description around the bladder and so part of what I'm hoping to do in this study, in listening to peoples descriptions, and what it's like for them, and what happens over time and if they notice changes is to get these descriptions down on paper, so then that way we can, as a medical community and a psychological community gain a better understanding of what the descriptions involved, right. So the idea is that, or at least for me is that if I know there's more to the story then I listen for more.</p>	<p>professionals.</p>	
<p>16. <b>P1:</b> Wouldn't more, being in the psychological field, wouldn't you get more out of another organ than the bladder?  <b>I:</b> [laughs] <b>P1:</b> I mean...  <b>I:</b> No! <b>P1:</b> No?  <b>I:</b> No, I find...  <b>P1:</b> I'm fascinated now with the bowel and the way they operate. That's an amazing system we have in there, and people don't really, I mean I was appalled at how ignorant people are, like when I said I had a colostomy, you what? What's that? [sounds of disgust] But I just, I don't know, I just thought it was a very interesting procedure all the phases you go through.</p>	<p>16. P1 suggests to I. that since she studies psychology, she might get more out of studying an organ other than the bladder. After I. expressed disagreement with this idea, P1 states that she is fascinated and amazed by the bowel and how it operates. P1 recalled that as she went through the bowel surgeries, she shared her experiences of the colostomy bag with other people and was appalled by their lack of interest and knowledge about the bowel. P1 expresses her bewilderment that other people don't find the colon procedure as interesting as she does</p>	<p>16. P1's urinary symptoms are of minimal interest to her. P1 is fascinated by the inner workings of the intestinal tract and bewildered that others don't share her feelings about it. P1 was offended when she encountered others who had little knowledge about the (intestinal) surgery she underwent. In the context of the interview, P1 may be implicitly expressing disappointment that the topic held less appeal for her.</p>
<p>17. <b>I:</b> Yes, and the multi-step, you know there's a couple of different operations and they take you through the different operations to help you heal, yeah.  <b>P1:</b> Well, just the process of the bowel, ordinary, daily...  <b>I:</b> Oh, I get it.</p>	<p>17. I. shares her understanding with P1 that it is interesting how a series of operations help her bowels heal and operate again. P1 clarifies that it is not the procedure itself that is interesting, but that she was fascinated by the daily processes that the bowel performs.</p>	<p>17. P1 is fascinated in the daily operations of the intestinal tract.</p>
<p>18. <b>P1:</b> I mean it was fascinating to eat your supper and then go in and change the bag, I call it the appliance, and there's your supper again. It was a strange experience 'till I finally saw the fascination how that food had been processed, become. Especially with the ileostomy, 'cause that's even closer to where you swallowed it, you know that, 'cause my other, my colostomy was way</p>	<p>18. P1 states that she was fascinated to eat her supper and then look at the contents of the colostomy bag to view how the body had processed the food she had just eaten. P1 stated that she was initially disconcerted viewing the colostomy bag and its contents. But she came to be fascinated by how the food was processed which grew even further when she had an ileostomy bag</p>	<p>18. P1 was initially disconcerted about viewing the externalized contents of her intestinal tract until she became aware of the transformation performed by the organ. P1 was fascinated by the different degrees of food transformation that were</p>



<p>down low, near the sigmoid, so it was a much less odorous area, but not nearly as interesting.</p>	<p>after the colostomy had healed. The ileostomy enabled her to view the intestinal contents further up the digestive tract and closer to the mouth where it was swallowed in its original form. As a result, she was able to compare what the processed food looked like at the top and further down the intestine. P1 stated that the odor associated with the ileostomy bag was far greater than with the colostomy bag, but the odor did not detract from her interest.</p>	<p>visible to her at proximal and distal parts of the intestinal tract.</p>
<p>19. <b>I:</b> Yeah, you got a more interesting look when you had the higher.  <b>P1:</b> Well it was horribly painful and sore, but yeah it was more interesting. I used to disgust my family. <i>[laughs]</i>  <b>I:</b> <i>[laughs]</i>  <b>P1:</b> Every time they eat corn on the cob, I still do. You know 'cause they all love corn on the cob and I don't. I will never eat corn on the cob again, never. Do you know why? 'Cause out it came just exactly the way it went in, so.</p>	<p>19. P1 stated that the ileostomy was very painful, but certainly more interesting to her. Her interest in the ileostomy was not shared by her family, who were disgusted by her descriptions about the bag and its contents. Even today, the feelings of disgust return when the family eats a meal together and corn on the cob is eaten. P.'s disgust in seeing the corn leave the intestine without being processed stops her from eating it.</p>	<p>19A. P1's interest in the upper half of the intestinal tract arose despite the presence of more intense physical pain.</p> <p>19B. P1 reacted in disgust when she observed certain foods that remained unprocessed by the intestine, and altered her eating habits to avoid them. P1 evoked disgust in her family members when she shared with them her observations about the unprocessed food in the intestine.</p>
<p>20. No, I just wondered how you connected, why you connected your psychological, I can't even say that properly, psychological studies to the bladder? <b>I:</b> Yeah, well one of the things that is so great about studying psychology is that in studying psychology we learn a lot about what's called qualitative research, right, and qualitative research is the research that we're doing, which involves sitting down with someone, talking about their experience, you sharing your story, and those techniques of qualitative research allow me to talk to a number of people and then put together these descriptions. When you study in other types of areas, like medicine and biology which is where I originally studied, those kinds of studies are all just, they're really about data, right, so how often, what was it like, you know, rate your experience from one to five. So they take your experience and they put numbers</p>	<p>20. P1 states that she wondered how I connected psychology to the study of the bladder. I. shares with P1 that she is interested in talking to people who can describe what their symptoms are like rather than having people assign numbers to it.</p>	<p>20. P1 reiterates her curiosity about how the interviewer made a connection between psychology and the study of the bladder.</p>

<p>on to it, and then you work with the numbers all the time. But for me doing all of the research with the numbers loses touch with people like you who go through this every day.</p>		
<p>21. <b>P1:</b> Hm.  <b>I.:</b> Yeah, so part of doing psychological research is really to engage with people who live it. You live with bladder symptoms every day, all day and have for quite some time and so that's what makes it interesting to be here with you.  <b>P1:</b> Okay. There's no help for people is there? Like no, what do you call it, when you go to alcoholic's anonymous, there's no help groups for any of these things, is there?  <b>I.:</b> I don't know of any support groups like that.</p>	<p>21. After I. shares her interests in talking to people who live with bladder problems, P1 expresses interest in knowing whether there are any support groups for people with bladder problems. I. replies that she is unaware of any bladder support groups.</p>	<p>21. P1 expressed interest in whether there were any support groups for people who have bladder problems.</p>
<p>22. <b>P1:</b> See that's what people need, yeah, support groups. Like my husband needs support groups with his dialysis, that's a tough thing to live with. It's very tough and I needed it with the colostomy, I wanted to kill myself many a night when you wake up and your covered, the bag has broken, I mean it's hard to go through all that and there's...I fault this country for that, there's no support whatsoever. You get a VON nurse that's half asleep and grumpy because you hauled her out of bed, and that's about all there is. They're wonderful, I'm not faulting they're marvelous girls, but that's about all there is. So I don't understand why there isn't more support.</p>	<p>22. P1 agrees that people need support groups, especially to deal with day-to-day managing of difficult medical conditions, such as her husband who undergoes dialysis. She recalls how difficult it was for her to manage in her daily life with the colostomy bag and that she needed support from others. She stated that she woke up many nights covered with fecal matter when her colostomy bag broke. P1 states that it was emotionally distressing and physically difficult to be in that situation, and she needed the support of other people to help her. P1 stated that she did have a VON nurse come by to help out, but the nurse's annoyance and own personal reactions to her job left P1 without the emotional support she needed. Although P1 expresses compassion for nurse's own emotional reactions to being disturbed by the needs of patients, she doesn't understand why there isn't more support offered to patients like her.</p>	<p>22. P1 acknowledged the importance of professional emotional support for individuals who cope with chronic and difficult-to-manage health conditions. P1 was satisfied with the home care she received post-operatively, but felt her emotional needs were not always attended to.</p>
<p>23. <b>I.:</b> With the bladder symptoms there's a lot of written kind of support available, like on the internet and for example, with the [NAME] centre, [NAME]'s got a lot of stuff written about the bladder that she, pamphlets and things like that, but there's not a lot of people getting together to talk</p>	<p>23. I. states that there is much written support available for people with bladder problems, especially at the centre where the interview is being conducted, but there are few groups available where people can talk about it. P1 agrees that the act of discussing</p>	<p>23. P1 agreed that discussing her bladder problems with other people has value to her, and expressed interest in participating in a support group.</p>

<p>about it.  <b>P1:</b> Yeah, and I think that's an important thing.  <b>I:</b> Well, see and that's one of the benefits of psychology is that in doing studies like this, is that we can start to get on paper you know, what people's distress is like and what it's about, and then start to put together things like support groups that might help people, you know, talk about it.  <b>P1:</b> That would be great. I would love to part of that.</p>	<p>the problem with other people is an important thing for her. I. states that in doing a psychological study, we can start to learn about how it's distressing for people and build support groups to help them. P1 states that she would like to be part of those support groups.</p>	
<p>24. <b>I:</b> Maybe in a few years there might be something along the lines.  <b>P1:</b> Oh, hell I'll be dead by then.  <b>I:</b> Oh dear. Not (?? inaudible)  <b>P1:</b> Oh, I forgot to mention to you something else I had. I had a heart attack three days after the first operation. <b>I:</b> Okay. <b>P1:</b> That's why I say I'll be dead... [laughs]  <b>I:</b> Oh dear.  <b>P1:</b> I hope to get some weight off, get some exercising done.</p>	<p>24. In response to I.'s suggestion that bladder support groups might be available in a few years, P1 sarcastically states that she might not be around at that time. P1 states that she had a heart attack after her first bowel surgery, and she wonders about how much time she has left in her life. In the future, P1 hopes to take care of herself by reducing her weight, and starting to exercise again.</p>	<p>24. P1, who experienced a heart attack a few years ago, wondered about the time she has left in her life, and expressed a desire to improve her health.</p>
<p>25. <b>I:</b> So, [SI], one of the things I was curious about hearing more about, now that we've talked about what your urinary symptoms are like, is, when we talked on the phone one of the things that I asked you to do was think about your past experience and find a situation where you've had some leakage or urgency and describe it in some detail about what happened to you.  <b>P1:</b> Oh, I can do that. <b>I:</b> Okay, so why don't we try that. <b>P1:</b> Have you got that thing on? <b>I:</b> I think it's running. <b>P1:</b> Oh okay. <b>I:</b> Okay, looks good.</p>	<p>25. In response to I.'s request to describe a situation where P1 has had urgency or leakage in detail, P1 responds that she is ready to proceed, and confirms that the tape will record her voice.</p>	<p>25. P1 affirmed she is ready to provide a description of a situation where she has had urinary urgency or leakage.</p>
<p>26. <b>P1:</b> It was Christmas, I think I told you on the phone and I knew I wasn't going to make it to my daughter's home, my husband didn't know what to do and he said, well hang on, and he was going as fast as you can on the [NAME OF HIGHWAY] at Christmas. The highway was pretty busy.  <b>I:</b> So you were in a car at the time.</p>	<p>26. P1 stated that her episode of urinary urgency happened at Christmas. She recalled that she was in the car with her husband, and they were driving to her daughter's house. She became aware that she had an urge to urinate and that she wasn't going to be able to hold off urinating long enough to reach her daughter's house. She informed her husband of her need to use the toilet. Being in the midst of heavy traffic on the highway, her husband wasn't sure what to do and told her to do the best she could</p>	<p>26. P1 was a passenger in a car <i>en route</i> to a family member's home for a seasonal celebration when she became aware of the need to urinate. P1 was afraid that she would not be able to put off urination long enough to reach her destination. P1's sense of uncertainty, panic and powerlessness heightened alongside her awareness of the obstacles preventing an</p>

	while he tried to get to a place where a toilet was available. P1 also stated that the car was already going as fast as possible, and her husband could not increase the speed of the car on the highway because they were surrounded by numerous cars. P1 felt a sense of panic and powerlessness about the inability to take any action that would allow her to locate a toilet quickly.	accelerated arrival at her destination. P1's husband was also upset.
27A. <b>P1:</b> Yeah, my problems always start in the car, like the urges. Of course at home, I'm in an apartment so, how far am I from the bathroom, eh?	27A. P1 states that she usually experiences problems with urinary urge in a moving vehicle. When she is at home, her feeling of urinary urge does not pose a problem for her as she is usually close to the bathroom.	27A. For P1, the feeling of the urge to urinate is problematic when she is not in close proximity to a bathroom, and especially when she is in a moving vehicle.
27B. <b>P1:</b> And I get out of the car, I started to cry 'cause I said, I can't hold it. He said 'just bring the door in', and I had my jeans on, and I peed right through them, everything, my shoes, everything.	27B. P1 recalls getting out of the car at her daughter's house. In a plea for help, she states aloud that she is unable to hold the urine any longer. She hears her husband tell her to close the car door. She starts to cry as the urine is released from her body and begins to soak through everything that she is wearing, including her jeans and her shoes. She is powerless to avert the urine leakage.	27B. As P1 emerged out of the car at her destination, she felt powerless to stop the release of urine. P1's clothes became saturated with urine and it was an extremely emotional moment for her.
28. And I went in the house and my son-in-law. I told him quickly what happened. He just put his arms around me and just lifted me up the stairs, "Come on Mom, Merry Christmas", made a big, 'cause the place, the place was full of teenage boys, and here I am wet, 'cause it was one large volume of pee [ <i>laughs</i> ]. <b>I.:</b> Oh. So the entire, because the tape won't be able to see.	28. P1 recalls entering her daughter's house and telling her son-in-law what happened. Her son-in-law hugged her as he said hello, wished her a Merry Christmas and lifted her up the stairs. P1 noted that her son-in-law acted to move her into the home safely and quickly, and there was a party going on in the home and other guests were present. P1 was self-conscious about her urine-soaked clothes, which might be easily seen by others in the home. P1 was afraid that the young teenage boys would see her in her wet clothes, which would embarrass her.	28. P1 confided in a family member about the urine leakage, and was comforted by his warm greeting and assistance. P1 felt self-conscious about the wet clothes that revealed her accidental loss of urine, and was concerned that other houseguests would see her.
29A. <b>P1:</b> That was very embarrassing. <b>I.:</b> Yeah, so you were wet in the entire sort of groin area of your pants, all the way down to the bottom. <b>P1:</b> All the way down. It was a good job I did.	29A. P1 was very embarrassed about being seen by others with her pants wet, which were soiled from the groin area to the bottom of the pant legs.	29A. P1 was very embarrassed about her urine loss and especially the location of the wet spots.

<p>29B. <b>I.:</b> Oh yeah, yeah, yeah. So what was it like for you to enter the house when this happened?  <b>P1:</b> Oh it was embarrassing. It was degrading, humiliating, and everybody, my daughter, my husband, son-in-law saying, ‘you know mom, don’t worry about it, it happens to everybody’. No, it happened to me, and that’s what you worry about. I don’t care about everybody else. They haven’t got wet pants on Christmas Eve. I was feeling sorry for myself in a big way. It happened to me, you know.</p>	<p>29B. In response to I.’s question about how she felt to enter the home after urinating on her clothes, P1 stated that she felt degraded and humiliated. P1’s daughter and son-in-law attempted to console her and normalize the leakage as something that happens to everybody and so, not worth worrying about. But their offers of help and support did not alleviate P1.’s distress. P1 said that she didn’t care if the urine leakage happened to other people – it happened to her on a special occasion in front of other people, and she will worry about it. P1 stated that she felt regret and ashamed. The loss of urine happened in front of other people, but she felt a very private and internal sense of loss.</p>	<p>29B. P1 felt intense emotional pain and regret about the unintentional urine loss that occurred in the presence of her family and other guests. P1 experienced a painful loss of self-respect, and her family’s attempts to provide consolation did not alleviate her distress. It was something that she could not distance from her personhood (?existential moment for her)</p>
<p>30. But we got over it, thank god for my son-in-law. He was amazing. <b>I.:</b> So he wrapped his arms...? <b>P1:</b> He just wrapped his arm around me sort of, and sort of half, ‘cause I couldn’t go up stairs at that point, I wasn’t supposed to, and the ground level door, there’s steps up to the first level. So I had to take, he sort of always carried me up the stairs, boosted me, because I was fresh out of something, one operation, I guess the first one. And I couldn’t, you know, maneuver the steps very well, and there’s no hand railing at that point on those steps.</p>	<p>30. P1 stated that she was able to get through it okay, especially with the help of her son-in-law. Her son-in-law physically assisted her to move up the stairs safely and quickly. P1 recalled that she was in the midst of recuperating from one of her early surgeries, there were no hand railings to help her maneuver up the stairs, and she was unable to get up on her own, so she appreciated her son-in-law’s help.</p>	<p>30. P1, whose movement was limited after surgery, was grateful for the physical help from a family member that enabled safe and quick entry into the home.</p>
<p>31. <b>I.:</b> So you had to go up...?  <b>P1:</b> So nobody saw me.  <b>I.:</b> Oh, okay. So you had to go up the stairs to get to the bathroom or to?  <b>P1:</b> Oh, I had to go right through the house.  <b>I.:</b> You had to go right through the house. [laughs].  <b>P1:</b> Yes. [laughs] the other end.  <b>I.:</b> And pass the, and pass the room full of...  <b>P1:</b> Kids. Nobody, I mean I was flattering myself in thinking anybody would notice me. They never noticed a thing. Which, you know, how eighteen, nineteen year olds are. I just thought, I can’t go in there with all those kids.  <b>I.:</b> Oh yeah.</p>	<p>31. Her son-in-law’s efforts helped to shield P.’s visibly wet clothes from other guests in the home and alleviate her concern about being seen. In response to I.’s questions about where P1 had to walk, P1 stated that she had to walk a considerable distance through the house to the other end, which entailed passing the room full of kids. She did not want the teenage boys to see her with her clothes wet. P1 was afraid of being embarrassed and humiliated in front of them, and she feared they might say something cruel to her. The teenagers did not notice her.</p>	<p>31. For P1, the physical help by a family member protected her from being seen by others whom she believed would say something to ridicule or humiliate her.</p>
<p>32. <b>P1:</b> But now we joke about it, the</p>	<p>*32. Today, P1 is able to take a light-</p>	<p>*32. Today, P1 is able to</p>

<p>Christmas that Grammie peed herself, you know that's the funny thing now.  <b>I:</b> <i>[laughs]</i> Yeah.  <b>P1:</b> That was my worst scenario.</p>	<p>hearted view of her worst moment in time.</p>	<p>take a light-hearted view of her worst moment in time.</p>
<p>33. <b>I:</b> And in hindsight and thinking about it, I mean, does it hold any other meaning for you?  <b>P1:</b> In what way do you mean?  <b>I:</b> In any way, I mean now when you think back about it, you know, it was...  <b>P1:</b> Yeah, the love of my family. <b>I:</b> Yeah.</p>	<p>33. Instead of concentrating on herself and her illness, P1 states that the incident taught her about the love of her family for her.</p>	<p>33. For P1, the incident of urine leakage was revelatory of how much she is loved by her family.</p>
<p>34. <b>P1:</b> The caring, they could have been embarrassed, you know, because there was, there were guests there aside from the teenagers. Yeah I just, it was very nice the way it was handled and kind of lightly joked about. I'm blessed really, I have a lovely family, I have three teenage, well they're not, one's a teenager now, the other two are beyond it. Twenty-five, twenty-two and fifteen. So I am blessed. No girls, not a girl. I'm going to keep them, because I really like them.  <b>I:</b> <i>[laughs]</i> They're keepers are they.  <b>P1:</b> Yeah. The eldest is just the light of my life, he just, I don't know, I just light up when he walks in a room.</p>	<p>34. P1 is aware that her family could have been embarrassed of her in front of their other guests at the party, especially the other adults. Her family did not behave that way; instead, they helped to protect her from feeling embarrassed and humiliated in front of the other guests. P1 stated that the episode was handled nicely and lightly joked about afterwards. For P., the episode was a demonstration of how blessed she is by her lovely family and grandchildren who care for her and protect her. P1 states that she really likes her family and wants to keep them around.</p>	<p>34. P1 was appreciative of her family's help, which afforded protection from the humiliation she expected to undergo. P1 felt less troubled when her family later laughed about the incident, which provided levity about the incident.</p>
<p>35. <b>I:</b> So when, so I just want to revisit a moment in time in your story where you had gone in to the room and you'd been embraced by, it was your son you said?  <b>P1:</b> My son-in-law.  <b>I:</b> Your son-in-law.  <b>P1:</b> But he's my son as far as I'm concerned.  <b>I:</b> Yeah, yeah, and so what was it like at that moment that he embraced you?  <b>P1:</b> Well he always embraces me, he's, his mom, his dad is dead now, but his mom lives in England and I'm his mom as far as he's concerned. He, many times he's told me, I mean much more to him that his, he doesn't like his own mother unfortunately. She's a bit of a bitch. But fortunately this notion (??inaudible) between us.  <b>I:</b> Yes, yes.</p>	<p>35. In response to I.'s question about how P1 felt when her son-in-law embraced her, she stated that he usually embraces her when they see each other. They have a close relationship and P1 views herself as a mother to her son-in-law. P1 states that her son-in-law told her that he doesn't like his own mother, who resides in England, and his father is dead. P.'s son-in-law also told her that she means more to him than his own mother. P1 is pleased about their close relationship with him.</p>	<p>35. P1 is pleased about her close relationship with a family member, who responded to her with his usual warmth and affection after the urine leakage episode.</p>
<p>36. <b>P1:</b> So, he's always very loving with me. He hugs me a lot, and he'll do anything in the world for me. I don't know how I, I had a very unlucky life with men, but I sure got lucky with that one. I should</p>	<p>36. P1 states that her son-in-law is always very loving with her. She is often embraced by him and confident that he will do anything to help her. P1 states that she was very unlucky in</p>	<p>36. P1 is confident that she would receive unconditional support and help from a male family member when needed, unlike other</p>

<p>have picked a husband as good as the son-in-law. However. Are you married?</p> <p><b>I.:</b> I'm not.</p> <p><b>P1:</b> Stay that way.</p> <p><b>I.:</b> [laughs] Yeah.</p> <p><b>P1:</b> Something I'd never do again.</p>	<p>her own relationships with men, but got very lucky in having this relationship with her son-in-law. P1 expressed some regret about not picking a husband that was as good as her son-in-law is. P1 asks I. if she is married. In response to I.'s statement that she is not married, P1 states that she would never marry again, and warns I. that she should also stay unmarried.</p>	<p>relationships she has had with men.</p>
<p>37. <b>I.:</b> Was there any other reactions from other family members that night that you can...?</p> <p><b>P1:</b> Not really, just my daughter, she got me all dry clothes and she just came to the rescue as she always does. It's just a wonderful feeling to be cared for that much.</p> <p><b>I.:</b> You felt cared for when they were tending to...</p> <p><b>P1:</b> Oh, yeah, I felt lucky that I peed my pants.</p> <p><b>I.:</b> You did?</p> <p><b>P1:</b> After, yeah I did, 'cause I got thinking, we were sitting around the tree and that, I'm a pretty lucky person.</p> <p><b>I.:</b> Uhuh.</p>	<p>37. In response to I.'s question about the reactions of other family members to the urine leakage, P1 states that her daughter offered her some dry clothes to put on, which really helped her to preserve her dignity in front of others at the party. P1 felt that her daughter really cared for her. Again, P1 thinks of others rather than herself and she even considers her illness to be a type of blessing because of how her family related to her.</p>	<p>37. For P1, the receipt of dry clothes from the host (her daughter) enabled her to establish a sense of dignity and mix amongst other guests. The reactions of P1's family were a demonstration of their care and affection for her, and she came to view this incident as an opportunity to realize her good fortune.</p>
<p>38. <b>P1:</b> And you hear so many people ripping in to their kids and their families and their relatives fighting over nothing. It's like kind of, I guess it's because I've almost died twice. Oh that's something else I had too, I forgot about it, I had, I almost died one night from, what is it you get, dehydration. We didn't know what it was, and my husband finally called the ambulance, and my, my pulse had stopped by the time they got me in the ambulance. That was close.</p> <p><b>I.:</b> That's very serious.</p>	<p>38. P1 states that she hears about other families who spend a lot of time fighting over inconsequential matters. For P., she had almost died twice. She recalled that she came very close to dying another time from dehydration. Initially, they were not sure why she was so ill, but when her husband finally called for an ambulance, she was very close to death. P1 stated that her pulse had stopped while on her way to the hospital – so it was a real close call for her.</p>	<p>38. P1's close call with death (once due to dehydration) strengthened her desire to cultivate positive relations with family.</p>
<p>39. <b>P1:</b> And I think it gives you a whole different outlook on life, you know, I'm not petty like I used to be. And I can't abide pettiness. You know there's so much going on in Canada and the United, especially the States, I follow the American news a lot. My Dad was an American and I'm very interested in their</p>	<p>39. P1 states that her experiences of being near death have given her a different way of looking at the world. She used to be spiteful with others, and now she will not tolerate that behavior. She stated that there is a lot going on in the world, but she will not tolerate when there is a lot of attention</p>	<p>39. Near fatal medical emergencies brought about a new perspective for P1. P1's perspective that things could disappear at any time led her to focus on what was important to her, rather than on inconsequential or petty</p>

<p>politics, I couldn't care less about Canada which is a bad, bad attitude. It's boring. But there's so many petty, stupid things going on, it's not worth it, it could go just like that.</p> <p><b>I:</b> Uhuh. So, it strikes me that your experiences, these near fatal experiences have sort of impacted...</p> <p><b>P1:</b> Smartened me up.</p> <p><b>I:</b> Yeah, it changed the way you think about things.</p>	<p>paid to small things that have little consequence in the bigger picture. She acknowledges that her experience of being close to death have really changed the way she thinks about the world and the things that happen to her.</p>	<p>matters.</p>
<p>40A. <b>P1:</b> Oh, definitely. The whole session since '03, I think it happened for a reason. I used to say, why God, why are you doing this to me? I just felt really sorry for myself when I lost a real close friend. I think that bothered me a great deal. I never saw her after the first surgery when the bowel perforated. I never saw her again, and it was SARS going on at that time, so was that '03 or '04.</p> <p><b>I:</b> I think that's '03.</p> <p><b>P1:</b> Yeah, well it was '03, and that's why...</p> <p><b>I:</b> '03 to '04, actually it was that winter.</p> <p><b>P1:</b> And people were staggered coming in to the hospital, like you could only have one person at a time I think it was, so I just kept wondering why aren't you coming, where are you? She never, I never heard from her again.</p>	<p>40A. P1 stated that she believes that the series of medical crises and surgeries happened to her for a reason. At first, P1 stated that she asked God why s/he was doing this to her. While she was in the hospital, her relationship ended with a very close female friend and she felt sorry for herself. Her friend visited her initially after the first surgery, but never again. The SARS crisis was going on at that time, and the hospital limited the number of visitors to one at a time. Her friend didn't come to see her in the hospital, and she kept wondering about where she was. P1 stated that she never heard from this friend after that.</p>	<p>40A-1. P1 believes that the series of medical crises (non-urinary) unfolded for a higher purpose or meaning.</p> <p>40A-2. P1 was deeply disappointed by a close friend who did not visit during her recovery period in-hospital as expected, and she was saddened by the dissolution of this friendship.</p>
<p>40B. She wrote me a letter to say she was glad I decided to go on with my life. I'm not to this day sure what that means. But she had lost her husband and I had thought I had been a very good friend to her.</p>	<p>40B. P1 stated that later she received a letter from this friend, which expressed encouragement for her to 'go on' with her life. P1 stated that she never did really understand what her friend was trying to convey to her in the letter. P1 was hurt by the rejection of her friend. P1 stated that she had supported her friend during the period when her husband died and her friend needed her help. She doesn't understand why this friend couldn't support her during the medical crisis when she most needed it.</p>	<p>40B. P1 was hurt by her friend's rejection while she recuperated in hospital, and remained uncertain of the reason for this friend's lack of support.</p>
<p>40C. It disgusts a lot of people. You wouldn't believe how people react to a colostomy. A harmless little bag sitting there turns people right <i>[sound of disgust]</i> colostomy. Did they not know how the first one was developed? It's an interesting</p>	<p>40C. P1 believes that her friend did not return because she was uncomfortable and disgusted by the colostomy bag. P1 stated that she tries to talk about the colostomy bag with other people, to tell them about how it</p>	<p>40C. P1 believes that her friend did not visit her during her medical crisis (non-urinary) because she, like others, was uncomfortable and disgusted</p>



<p>story, and I tried to tell a few people, but they didn't believe me.</p>	<p>was developed, but people don't see it as interesting and don't want to talk about it. Other people feel disgusted and turn away when she tries to do this.</p>	<p>by the colostomy bag.</p>
<p>41. <b>I.:</b> And in comparison to the bowel, now you said you find the bowel a bit more interesting than the bladder.  <b>P1:</b> I find it fascinating.  <b>I.:</b> Yeah. <b>P1:</b> It really is, I don't know how surgeons operate on it 'cause it's very hot and odory. Terrible odor. My doctor kids me about it now, but you know I was some kind of, you can see why they give you something like Citrimax or some kind of laxative to clean you out, because it's like working in a cesspool and I was an ungodly mess, you don't want to rupture... <i>[the tape is stopped]</i></p>	<p>41. In response to I.'s question, P1 stated that she finds the bowel much more fascinating than the bladder. She is perplexed by how surgeons would operate on the bowel because it is so hot and full of a terrible odor. She jokes with her doctor about it, but she is given a laxative to remove the contents of the bowel before surgery because otherwise it is dirty and messy and you wouldn't want the contents to spread out into the abdominal cavity.</p>	<p>41. For P1, the bowel is a much more interesting organ than the bladder.</p>

*Analysis of P2's Transcript*

<p><b>P2's Verbatim Transcript Separated Into Meaning Units (P2=Participant #2; I=Interviewer)</b></p>	<p><b>Psychologically Sensitive Expressions (Highlighting Relevant Psychological Sensitivity to Phenomenon)</b></p>	<p><b>Second Transformations (To Enhance Psychological Sensitivity to Phenomenon)</b></p>	<p><b>Third Transformations (To Further Enhance Clarity, As Needed)</b></p>
<p>1. <b>I:</b> So, the interview, the tape is now on and the interview has two parts to it. In the first part, which we'll start now, I'm curious to hear you describe your history of the urgency symptoms, so when, from your earliest memory of when they started and then sort of take me through like a bit of a history of how we got to be here today, and include things like treatments and just your experience of it and how it's affected you just over that timeframe.  <b>P2:</b> Okay. My first memory of it would have been, ah, trying to think back... I think I, probably after, like, the third child was born. I don't, you know, other than when you're pregnant, you know, you have to go to the bathroom all the time. That would have been pretty normal stuff. I would think after the first child was born, then I, or after the third child was born, then I would have maybe been more aware that I can't hold as much, you know, I couldn't go as long.</p>	<p>1. In response to I's query about P2's earliest memory of urinary urgency symptoms, P2 struggled to decide about when urinary urgency had become a problem for her. She recalled having a frequent need to urinate dating back to her pregnancy with her first child, and in each pregnancy thereafter, which she viewed as characteristic of that stage. P2 stated that she was more aware of her urinary urgency problems after her third child was born, including an inability to hold as much urine in her bladder and having less time between voids.</p>	<p>*1. P2 stated that she began to experience what she perceived to be some urinary abnormalities when she first became pregnant and with subsequent pregnancies as well. For P2, the urinary abnormalities became more pronounced after the birth of her third child, when she became aware that her bladder could no longer hold as much urine as before, and she had less time between voids.</p>	
<p>2. And I'm trying to think if I've, there, for about I'd say, hmm, probably about 10, no longer than that, maybe about 15 years ago, I was aware that I was, you know, if I would cough or sneeze or whatever, there would be a little dribble coming out, and I thought, oh I hate that. So I started wearing the little day pads, you know the little thin ones, and probably, and wore those probably for six, eight years,</p>	<p>2. P2 recalls experiencing a small amount of urine leaking out when she coughed or sneezed beginning about 10 to 15 years ago. She stated that she hated the urine leakage. P2 acknowledged that she wore small pads every day for 6 to 8 years to absorb the urine that leaked out and avoid stains of urine in her underwear.</p>	<p>*2. In addition, P2 recalled becoming aware of instances of urine leakage some 10-15 years earlier, which she despised. P2 acknowledged that for about one-half of the time since her awareness of the leakages, she wore small pads to protect her underwear.</p>	

<p>regularly every day, just 'cause I didn't like the little stains in my panties and stuff like that.</p>			
<p>3. And so, wore those for a number of years and then found that I couldn't seem to find a type that was not irritating, so I was getting vaginal infections and you know, yeast infections and stuff and I thought, 'Well this is ridiculous', and so I just stopped doing that probably about three, four years ago. And you know, I do leak a bit as we discussed and do, there is, you know, a little bit of staining, which I don't like. But I have just decided that I, you know, I can bleach those pants or I can toss them out every once and a while and that. But, if I, and so, so really that's kind of been my experience of it.</p>	<p>3. P2 stated that she wore the small pads to collect the leaking urine for years, but began to experience skin irritation and vaginal (yeast) infections on a regular basis. Despite trying numerous kinds of pads, P2 became exasperated by the ongoing physical discomfort of irritations and infections in the urogenital area. She stated that she stopped using pads about 3 or 4 years ago, and since then, has noticed urine stains in her underwear. P2 stated that she is unhappy about the urine stains on her underwear, but has resigned herself to using stain removal practices, as well as regularly replacing the underwear, instead of attempting to avoid the urine staining by using protective pads.</p>	<p>*3. P2 stated that while the wearing of the pads helped her in one way, a side effect was the irritation and infections that they caused. After she stopped using pads, P2 confronted a less disturbing difficulty - stains on her underwear - which she believed could be managed more easily. While not directly "urinary urgency", the lack of control over urinary voiding is a problem for P2.</p>	
<p>4. It was getting more problematic as I was getting closer to the hysterectomy, so now it's what, sixteen years ago or sixteen, fifteen, fourteen, something like that. And when I had fibroids, I had very, a really large, apparently really large, fibroid in my uterus, which was pressing down, which was meaning I was having to go to the bathroom all the time, and having heavy periods and all that.</p>	<p>4. P2 recalls that her urinary symptoms worsened about 14 to 16 years ago, just prior to a surgery to remove her uterus. P2 stated that she had a very large fibroid in her uterus, which increased the pressure on her bladder and her need to urinate. The fibroid also impacted her menstruation, resulting in heavy bleeding and associated discomfort.</p>	<p>4. P2 perceived a worsening of her urinary abnormalities around the occasion of her hysterectomy, about 14 to 16 years ago. P2 believed that a very large fibroid in her uterus was the cause of her urinary symptoms, as well as some menstrual abnormalities.</p>	
<p>5A. Well the gynecologist eventually said, 'You know, you need to have the fibroid out. You really do have to take it out', and said, 'If we do that, then while I'm in there', this is the gynecologist, 'While I'm in there, I'll do a bladder repair'. 'Cause I said, 'Well hey, why not fix up everything while you're in there? Do a bladder</p>	<p>5A. P2 stated that her gynecologist strongly recommended having the uterine fibroid removed, and she inquired about whether the surgeon could simultaneously repair her bladder to alleviate her urinary symptoms.</p>	<p>5A. P2 stated that she inquired about the possibility of the surgeon performing a surgical repair to her bladder at the same time that the uterine fibroid was to be removed (hysterectomy).</p>	

<p>repair?’</p> <p>5B. And he says, ‘I can do, I will do’, what they were calling at that time, or I recall him saying, would be a sort of a mini-version. In other words, I guess you can go in, or at that time, you could go in almost like a c[esarean]-section and do a whole what they call shoring up, you know a whole pulling up of everything. But he said, ‘I won’t do that.’ ‘Cause they were going, ‘cause they did the hysterectomy vaginally, and so he said, but ‘I’ll do what I can do vaginally, I’ll pull it up as much as I can’.</p>	<p>5B. P2 was informed that, since the surgery to remove her uterus would be done vaginally, the surgeon could attempt a ‘mini’ bladder lift only. P2 stated that a full lift of the bladder and internal organs involved surgically opening the abdomen; however, she was not able to have this procedure alongside the hysterectomy. P2 was informed that a small bladder lift could be done through the vagina.</p>	<p>5B. P2 learned that the vaginal mode of access the surgeon planned to use for the hysterectomy would not provide the extent of access to the abdomen needed to perform a “full bladder lift”. As a result, P2’s bladder lift was limited to a “mini” version.</p>	
<p>6. So when it was all over, he, I said, ‘How’d it go?’ And he said, ‘Well I was able to do some. I think you’ll find a little bit of relief, but probably not a lot, because I wasn’t able to do a lot’. He said, ‘You actually need to have that taken care of’. And so I said, ‘Okay whatever’. And it didn’t, I didn’t see any perceivable difference then, so I’ve just kind of carried on since then. And it’s been, pretty much, I would say the same, for, since then and now. You know, I don’t know that it’s gotten, I’m trying to think, the way I pee as we described, you know, it’s not as fast, it’s not as hard, there’s some extra left when I stand up, there’s all those sorts of things, that has all come in the last four, five years I guess, three, four years, but other than that, the actual how often would I dribble or something, if I sneeze or cough or something, I’d say that’s been pretty constant I don’t know that that’s getting any worse, it’s been pretty constant.</p>	<p>6. P2 stated that she inquired about the success of the surgery, and was advised that the surgeon was able to raise the bladder only a little and she would find a little bit of relief from her urinary symptoms. She noted that the surgeon suggested having another medical procedure to take care of the bladder ‘lift’. P2 stated that she did not notice any difference in her urinary symptoms after the surgery, and the number of times she leaked urine has remained constant. In the last 3-4 years, the speed and strength of the urine stream has weakened, and she leaks sometimes when she stands up after voiding, and after coughing or sneezing.</p>	<p>6. Based on the feedback from her surgeon, P2 expected a bit of relief in her urinary symptoms after the “mini bladder lift”, but she did not subsequently perceive any difference. P2 was advised that another surgery (presumably a “full” bladder lift) was needed to deal with the problem. In the last 3-4 years, P2 perceived further worsening of her urinary abnormalities, except for urine leakage, which remained at a similar frequency.</p>	<p>6. P2’s expectations about the mild relief in urinary symptoms after the “mini bladder lift” were never realized. She was advised (by her doctor) that another surgery was needed to deal with the problem (presumably a “full bladder lift”). In the last 3-4 years, P2 perceived further worsening of her urinary abnormalities, except for urine leakage, which remained at a similar frequency.</p>
<p>7. What has actually, interestingly enough, made me</p>	<p>7. P2 acknowledged that her decision to seek medical care</p>	<p>7. P2 initiated visits to her medical doctor about the</p>	

<p>think more about it in the last few years is thinking, 'Okay I'm fifty-eight, if I need to have surgery at this, it's probably a good idea if I do it now'. My mom who, as you know I was just on the phone with, she's eighty-three and she actually has quite an issue with it and has to wear a...She's on her own and all that and does fine with everything, but she does have to wear a regular full pad and change it a couple of times a day. So she's got quite a problem and she has said, 'You know, gee I wished I'd have taken care of this a long time ago' and so it's, so what prompted me to go to the doctor then was that I thought, 'well, I should get this looked at, you know I should figure this out, if I need the surgery, do it now'.</p>	<p>for her urinary problems was prompted by concerns about undergoing surgery, and that doing so at a younger age might be beneficial for her. P2 stated that her mother, who has severe problems with urine leakage, regretted not seeking help when she was younger in age. P2 stated that her motivation to seek medical advice about her symptoms of urine leakage arose out of a concern that she might experience an outcome similar to her mother.</p>	<p>urinary symptoms out of concern that her condition may worsen in later life similar to her mother, who is incontinent and reliant on pads. P2 was motivated to determine whether she needed to have corrective bladder surgery because she perceived there to be benefits associated with having the surgery performed as soon as possible.</p>	
<p>8. And he kind of said, 'No you don't really, or you're not bad enough, or whatever, and you know, 'let's just try medication first'. If medication doesn't work, then let's think about surgery'.</p>	<p>8. P2 stated that she attended a physician who evaluated her urinary symptoms and noted they were not bad enough to necessitate surgery. The physician recommended use of medications first, and then if the drugs did not alleviate the symptoms, surgery would be considered next.</p>	<p>8-9. P2 was advised that her urinary abnormalities were not severe enough to warrant surgery, and that she should try medication before considering a surgical procedure. P2, who tried the medication but did not perceive any benefit, increased her efforts to practice pelvic floor exercises, which had also been recommended to her. P2 perceived some relief of her urinary symptoms with the pelvic exercises, and she continues to contemplate having a bladder repair sometime in the future.</p>	
<p>9. Somewhere between seeing Dr. [NAME OF UROLOGIST] and seeing my gynecologist, the suggestion was made that I really, really, get serious about these Kegels, which I've only half way done off and on in my life, and I thought, okay fine. This medication is not working. I'm going to really give these Kegels a try, and so I now do them pretty regularly every day. They've made enough of a difference that, is it still an issue? Yes, it is. Will I still consider surgery? Yeah, probably.</p>	<p>9. P2 stated that a regular practice of Kegel exercises was strongly recommended to her. P2 noted that previously she had only practiced Kegels irregularly, but when the medications weren't working for her, she was willing to commit to a regular daily practice. She acknowledged that the Kegel practice has alleviated her urinary symptoms, however the symptoms are still problematic for her, and she is likely to consider surgery in the future.</p>		

<p>10. But it's the urgency of all, the considering of all, that has backed off some because it's now better than it was. Like I said, I'm able to play sports. I'm able to run. I'm able to do all those things, however, if I know I'm going to go out and play sports, you know, if I'm going to go golfing or I'm going to work hard... Like we just moved and so there was a lot of boxes, and up and down stairs and all that. I wore pads on those days, just so in case I was straining or whatever. And I'm sure they, I'm sure I needed to. I don't normally now. I don't wear a day pad. I don't all that... but if I know I'm going to be in that situation, then I will.</p> <p>Q. As a sort of prophylactic, so, a preventative measure.</p> <p><b>P2:</b> Exactly.</p> <p><b>I:</b> Yes, yes.</p> <p><b>P2:</b> Exactly.</p>	<p>10. P2 stated that her urinary urgency is better now than it was in the past, and she is able to play sports and run. P2 acknowledged that if she is going to play sports or exert herself physically, she wears pads to prevent urine leakage onto her underwear and clothing. P2 acknowledged that while moving boxes up and down stairs during a recent move, she wore pads to capture urine leaking out during the physical activity. P2 noted that she does not wear a pad every day, usually but she will wear pads when expecting to be in situations where she will physically exert herself to prevent wetting herself if urine leakage occurs.</p>	<p>10. P2 noted that, at present, she perceives less 'urgency' compared to years past. P2 does not perceive any current limitations to participating in the physical activities she enjoys. P2 acknowledged that while she does not require use of a pad everyday, she will anticipate situations in which leakage may occur (e.g., sports, lifting) and wears pads as a precaution against wetting her clothes at those times.</p>	<p>10. P2 stated that she perceives less "urgency" compared to years past because her physical activities are not disrupted by urine leakage. P2 does not use pads everyday, but will use them in situations that she predicts leakage may occur (e.g., sports, lifting) as a precaution against wetting herself.</p>
<p>11. <b>I:</b> So, and when you were experiencing a few leaks you said, you said that it was just enough to soil the panty.</p> <p><b>P2:</b> Yeah, I would. Well one thing is I, because I take a lot of vitamins, there's a lot of B vitamin in my urine. So my urine is bright yellow. You know my urine is really yellow. So, if you get even a drop on your panties, it stains.</p> <p><b>I:</b> Oh, I see.</p> <p><b>P2:</b> You know, so, it's like, 'Oh crap'. It's not like I'm flooding or anything. It's not even that perception of wetness. There might be a sense of dampness, but not really wetness. And it would be more that, if there's even one or two little dribbles, it's going to stain.</p>	<p>11. In response to I's query about whether the urine leakage soiled her underwear, P2 acknowledged that her bright yellow-colored urine stains her underwear. She noted that she does not usually leak large amounts of urine, nor does she tend to perceive wetness in her underwear. Rather, P2 acknowledged that she often feels a light dampness in her underwear, which is not as bothersome as the bright yellow stains she sees on her underwear.</p>	<p>11-12. In response to I.'s query, P2 stated that when she experiences urine leakage she typically loses only a few drops that are contained to the cotton gusset of her underwear. P2 stated that the leakage is bothersome to her, but not because of the volume of wetness, which is only mildly perceptible to her, but rather because of the bright yellow stains it leaves on her underwear. In response to I., P2 clarified that she has never experienced an episode of urine leakage in which her clothes have become stained.</p>	
<p>12. <b>I:</b> Oh I see, I see, yes. So the volume, the volume of the loss has not been sufficient to stain, let's say, the clothes you</p>	<p>12. In response to I's query for further clarification about the amount of urine that ordinarily leaks out, P2 reported that she</p>		

<p>were wearing that day?  <b>P2:</b> Oh no, no, no, no, no. It's never gone that far. It would all get caught with just the little... I wear the little cotton liner, you know, the little panties that are cotton in the crotch part and so yeah, it would never get past there.  <b>I.:</b> Okay, so it really is just a few drops.  <b>P2:</b> Yeah.  <b>I.:</b> But, enough to stain as you were saying.  <b>P2:</b> Yeah, enough to stain.</p>	<p>has never experienced urine leakage that stains the clothes she was wearing. Instead, P2 reported that a few drops of urine usually leaks out, and is fully contained by the cotton gusset of the panty, but leaves a brightly colored yellow stain.</p>		
<p>13. But again, having said that, if I was like out in the yard working hard in the garden and suddenly sneezed, now there would be enough of a little, especially if I hadn't gone to the bathroom for an hour or so, there would be enough that yeah, it would wet my panties. And there have been times when I have had to come in and change my shorts because it was that situation. I'm out, I haven't peed in a while, suddenly I cough or something and there's enough to come out. That's probably happened I'd say, to that degree, probably only four or five times in the last few years. But it has happened.</p>	<p>13. Reflecting upon her comments, P2 acknowledged that there have been several times when her clothing has become completely soaked with urine. P2 reported that on these occasions, she was working in the garden and had not used the bathroom for at least an hour or more, when urine squirted out while sneezing or coughing. P2 noted that the amount of urine leakage was so great that her underwear and shorts were soaked and needed to be changed.</p>	<p>13. P2 added that, in the last few years, she has experienced several instances of urine leakage in which she was working outside, and the amount of wetness on her clothes compelled her to stop what she was doing and take immediate action to change them. P2 perceived that the extent of wetness in these instances was due to the accumulation of urine in her bladder as she worked outside on her property, which was released when she suddenly sneezed or coughed. For P2, these instances were problematic in that her ongoing activity was disrupted by the need to respond to the situation immediately (urgently).</p>	<p>13. P2 encountered several instances when she worked outside her home and experienced a urine leakage that forced her to cease her activity and go in and change clothes. P2 attributed these instances to her failure to empty the bladder while engaged in the activity, and the appearance of abdominal contractions (cough/ sneeze) that pushed out the bladder's contents.</p>
<p>14. <b>I.:</b> Um-hmm, Um-hmm. And I'm curious about if you could take me through a "normal day"... I guess in terms of drinking and peeing and just how you sort of organize everything and of course, describing some of your bladder habits, I guess.  <b>P2:</b> Okay. Well, mostly I work at home. I do training and</p>	<p>14. In response to I's request to hear about P2's drinking and voiding habits in a typical day, she stated that she is employed as a consultant, and works out of her home office, with some travelling to offer training workshops. She noted that her habits and patterns are very different in the two environments, and she will</p>	<p>14. In response to I's query, P2, who is employed as a consultant/trainer, stated that her drinking and voiding patterns varied depending upon whether she is working at her home office, or traveling to other locations (to offer workshops). P2 agreed to</p>	<p>14. P2 stated that she makes adjustments to her urinary and fluid intake patterns depending upon the environment that she is in (home, work, commuting). She agreed to describe</p>

<p>consulting and speaking and stuff like that, and so I have a home office, so I'm either at home or I'm getting all dressed up ready to go out to go speak or train somewhere. So those are kind of two very different days, so we'll take the at-home day first.</p> <p>I.: Okay.</p>	<p>describe a typical day in each of these situations.</p>	<p>describe a typical day in each of these environments.</p>	<p>each of these situations to I.</p>
<p>15. P2: I would get up around 7, 7:30. I would go out for a walk. As I say, it takes me about thirty-five minutes, it's got you know, maybe five to ten minutes of that is running or jogging, but the rest of it is walking as I fast as can. So I would go out and do that. I would get up, go to the bathroom. I would drink maybe like half a cup of water, just to kind of brush my teeth and stuff, go out for my walk, come back, and on my walk try to kind of finish, I take a bottle of water with me, so by the time I'm done, I would be finishing that bottle of water. And so, then I'd have breakfast and probably then, by the time I had breakfast, have a shower and get ready to kind of plop in front of the computer, I'd go to the bathroom again. And somewhere in there, either that first time or second time would actually have a bowel movement, generally speaking. So I'm in front of the computer, usually I'm good, so let's say that's now 8:30, 9 o'clock. I would go to the bathroom again, probably around 10, 10:30 and then be good until about 11, 11:30. Then, I always get up and go in, around 11, 11:30 and have a, have my little break and on my break I'll pour myself a diet Coke or something. And so, I haven't drank too much more from breakfast to the diet Coke although I do have a glass of</p>	<p>15. P2 stated that on a day that she works from home, she typically walks briskly in the morning for exercise, and then settles in to work in front of her home computer. P2 noted that she urinates about every hour to hour and a half, without any concerns or sense of urinary urgency. P2 reported having access to drinking water or other fluids for sipping and drinking as she needs or wants. Working until her husband arrives home from work, she urinates, as needed, about every hour or two in the evening, and then right before retiring to bed.</p>	<p>15. P2 stated that while at home she urinates about every hour to hour and a half while she works, every hour or two in the evening after work and once just prior retiring to bed. P2 did not have any bladder-related concerns or sense of urinary urgency while at home, and reported having access to water or other fluids for drinking as she needs or wants.</p>	<p>15. P2 stated that while in her home environment, she has a comfortable routine in which there is <i>ad libitum</i> drinking of fluids and access to toilets. P2 implied that she experiences a sense of ease in her home with respect to her typical habits of urinary and fluid regulation. P2 urinates about every 1.0 or 1.5 hours in this environment and does not report any "urgency".</p>



<p>water always on my desk, but more for sipping than anything. So then I would drink the diet Coke somewhere between 11:30 and 12, 12:30 and then again go to the bathroom again, come out here have lunch, in which I would drink maybe some water, maybe some milk or something like that. I would probably walk around, put some laundry on, that kind of thing, for lunch, you know. After I have lunch and then I would probably pee again and then sit back down in front of the computer... go until maybe 2, yeah 2, 2:30. Again, get up, go to the bathroom, walk around you know, get a drink, you know, walk outside... just to kind of clear my head and all that. Go back in, plop in front of the computer again, and probably pee again between, you know, around 4ish. I just kind of work until my husband gets home, so sometimes that 5:30, sometimes it's 6:30 whatever... so somewhere between 4 and 6:30, 7, I would go again at some point. And then, when he comes home generally we sit outside, so I would go again just before I go outside, have dinner, probably go, maybe once, maybe twice more in the evening and then always right before I go to bed. And, then usually I go to bed at like 11 and I usually kind of lay there and take a while to go to sleep.</p>			
<p>16. And if I take more than just a few minutes to go to sleep, then I get up to go pee, not because I really feel like I have to so much, but because I know I'm about to fall asleep and I don't want to, I'm going to try not to wake up in the night, so I'll go pee maybe at 11:30, 12 o'clock. <b>I.:</b> So kind of trying to fit one in</p>	<p>16. P2 acknowledged that if she is unable to fall asleep immediately after lying down in bed, she will rise from bed to urinate one last time not out of need, but as an attempt to avoid having her sleep disrupted by the need to void in the middle of the night.</p>	<p>16. On those occasions when P2 is unable to fall asleep immediately after retiring to bed, she will get up to urinate so as to avoid being awakened later.</p>	

<p>before the long night of sleep hopefully.  <b>P2:</b> Right.</p>			
<p>17. <b>I.:</b> Okay, and for your day of consulting?  <b>P2:</b> Okay, if I'm a day out and so I have to be sort of on the road by the morning, get up, same idea, have breakfast, I don't go for the walk, so have breakfast and everything, doll all up like you have to, do the hair the whole nine yards [<i>laughter</i>]. And then try not to drink much because I know it's going to take me an hour, hour and half, the weather who knows, to get from where I'm at to downtown [NAME OF CITY] wherever I'm going, which is always like usually an hour, two hours, three hours or whatever. And that's really when it's been a problem because even if I don't drink hardly anything when I, if I get on the road at like 7:30 or 8 o'clock and you know it's an hour and a half, two hours before I get in to [NAME OF CITY], I am dying by the time I get there.</p>	<p>17. P2 stated that on days when she needs to travel to a company to conduct a training workshop, she limits her fluid intake so that she can arrive at her destination without having an extreme need to urinate. P2 noted that her travel time varies anywhere between one to three hours depending on the weather and other road conditions, and she often arrives at her destination with a very desperate desire to void even if she had little to drink.</p>	<p>17. P2 stated that on those days when she commutes to work in another city (by car), she often experiences a "urinary urgency" (a desperate urge to urinate) as she nears her destination. Although P2 had limited fluid intake on days that she commutes, this strategy has not been helpful in alleviating the "urgency", and so it remains a problem for her.</p>	
<p>18. Like I really, that's when it's the most disturbing for me. It's because I'm on the freeway, and if you get stuck in traffic and the whole thing, and I'm a deadline, got to get there, got to get there, kind of thing. You get there and of course you're in this, you know...you're going to an office building and there's no bathroom...you've got to go and ask, 'Oh sorry can I...?' So that is really, I would almost do anything to get away from that.</p>	<p>18. P2 stated that she is most distressed about her urinary symptoms when she arrives at a place of work after a lengthy commute. While on the highway and delayed in traffic, she feels worried about arriving on time. P2 stated that her distress increases further when she arrives at her workplace with a strong desire to void, and can't find a bathroom. P2 implied that she is humiliated about having to ask for help to find a toilet and would do anything to avoid this experience.</p>	<p>18. For P2, the most disturbing aspect of the "urinary urgency" occurs when she arrives at the workplace. When P2 is delayed by traffic conditions, she feels stressed about arriving at her work commitment on time. She is delayed further when she is unable to locate a toilet and has to ask someone for help. P2 implied that she feels humiliated about having to ask for help in finding a toilet and would prefer to avoid these situations.</p>	
<p>19. What happens at home, fine. If I have to go every hour, that's</p>	<p>19. P2 stated that she is not distressed or bothered when she</p>	<p>19A. P2 stated that the frequency with which she</p>	

<p>fine. But it's all that, it used to be, and it's not so much again now, because you know in the last while because of the Kegels. But I'd say for several years there, I'd go in to a meeting, I would pee right before I go in to a meeting, and meetings generally are a least an hour, hour and a half before anybody feels the need to get up and go do anything and I would be just dying after forty-five minutes. And knowing that this meeting, you know I have to be there, I'm supposed to be, it's not over, people aren't leaving, you know, just waiting, hoping somebody says, 'Oh well let's stand up and take a bio-break and then we'll get back to this, kind of thing'.</p>	<p>has to urinate every hour while she is in the privacy of her own home, however she does become distressed when this occurs in the workplace. For a period of time, P2 recalled that she felt a very strong need to void in meetings that was very disruptive, despite urinating just before the meeting began. She expressed feelings of distress and anxiety associated with her sense of conflict about needing to leave the meeting to void, and her own desire to remain at the meeting to continue working. P2 implied that her sense of commitment to the ongoing work made it difficult for her to take a break to urinate while her coworkers continued to work.</p>	<p>needs to urinate is distressing and disruptive at the workplace, but not bothersome when she is in the privacy of her home. P2 added that her need to urinate is less frequent now that she regularly performs pelvic muscle exercises.</p> <p>19B. P2 recalled that, for several years, she often experienced "urinary urgency" (strong desire to void) in meetings at work and felt distressed about her need to leave the meeting to urinate while co-workers continued to work without her. P2 implied that, despite her "urinary urgency" (desperate need to use the toilet) she was uncomfortable (embarrassed) making the suggestion for a toilet break, and hoped a co-worker would do so instead. P2 doesn't like to be the one who calls for a break at a meeting, perhaps because it inadvertently calls attention to her own need for a urinary break.</p>	
<p>20. I've often excused myself from meetings or left workshops or whatever, not when I'm doing them, but when somebody else is doing them, because of having to go to the bathroom and slip back in. These days it's not quite so much. I'm usually pretty good now about being able to, so the whole day will go like that. If I'm doing the workshop, then whenever we break, you know, you usually break every couple of hours for a workshop. I will go to the bathroom every time I break. Just so I don't have to</p>	<p>20. P2 states that she has often excused herself from meetings or workshops led by others to use the bathroom to void and then return without any difficulty. Her need to leave meetings to void does not occur as frequently now compared to before. However, P2 stated that if she is leading a training workshop, she will arrange breaks every couple of hours, and at every break, she will urinate to avoid worrying about experiencing an urge to void.</p>	<p>20. When P2 attends professional workshops, however, she is much more comfortable in responding to her urinary needs. P2 stated that, as an attendee, she feels comfortable slipping in and out of an event to use the toilet <i>ad libitum</i> (less need to do so now compared to before), and as a workshop leader, she uses the bathroom at each scheduled break to avoid worrying about when the need to void may arise.</p>	<p>20. P2 stated that when she attends or leads professional workshops, she feels comfortable (does not experience distress) when responding to her typical urinary needs <i>ad libitum</i>. In these situations, P2 either responds to her urinary needs autonomously</p>

<p>be worried about it.</p>		<p>P2 implied that she feels a sense of independence (autonomy) in this context that allows her to act on her urinary needs without making overt declarations of toilet need/use to her co-workers, which is embarrassing for her. For P2, the experience in the workshop (MU#20) is different from her experience in meetings (MU#19), because she perceives herself to be in charge of the breaks in the former, but not the latter.</p>	<p>(i.e., she is in charge of the breaks) or she is able to use the toilet without drawing the attention of others, and thus, averting embarrassment. With respect to urination, P2 reports a greater level of comfort in the context of workshops (MU#20) than in the work meetings (MU#19).</p>
<p>21. And then the same thing, I'm good, but I'm always worried on my way home, you know you get stuck in [NAME OF CITY] traffic, and you're there for three and a half hours and that's, you know, that could be not good.</p>	<p>21. During her commute at the end of her workday, P2 stated that she experiences worry about encountering delays or accidents on the highway where she may have a strong need to void.</p>	<p>21. P2 stated that at the end of her workday, she often worries about traffic conditions along her homebound route. P2 anticipates that if her commute is delayed, she may experience a desperate urge to urinate ("urinary urgency").</p>	
<p>22. <b>I.:</b> And just curious about the experience of being in traffic... when you're actually sitting in traffic and it's been an hour and half, so you're approaching the time that you'd like to void or maybe past the time that you'd like to void. What's it like, what does it feel like for you? <b>P2:</b> Well, there's been times.... I'll give you the most extreme example, is there was one time, there was one of those snowstorms, left [NAME OF CITY] at 5, it was now like 8:30 on the road, and so I had been on the road forever, and was just dying, you know, just thought, 'okay, this is ridiculous', we're going like five miles an hour, snow blowing everywhere, you know, couldn't see the car in front of you and all that, and I'm just</p>	<p>22. In response to I.'s query, P2 acknowledges that she has encountered situations where she has been in traffic for hours and felt a very desperate need to void. P2 states that, in one extreme situation, she was driving home during a snowstorm in very slow-moving traffic through conditions of poor visibility. On the highway for about three and a half hours, she felt an extremely strong and persistent need to urinate and felt powerless to find a way to exit the highway and locate a toilet. Uncertain of what to do next, P2 remarks that the entire situation felt absurd.</p>	<p>22. In response to I.'s query, P2 acknowledges that she has encountered situations in which she had a "urinary urgency" – a desperate and persistent need to urinate after being delayed when traveling by car. In one instance, P2 was delayed more than three hours (due to weather, traffic, poor visibility) and she felt powerless to find a way to exit the highway and locate a toilet. Uncertain of what to do next, it seemed to P2 that the entire situation was absurd.</p>	<p>22-23A. P2 stated that she encountered "urinary urgency", as well as emotional distress, after being delayed while commuting. The "urinary urgency" arose when P2, who had a desperate need to urinate, encountered (environmental) obstacles that interfered with locating a toilet. P2 reacted with disgust about the situation, and she initially attempted to delay voiding until she arrived</p>

<p>dying, having to go, and exits are too far in between, you know you couldn't even get off, and I thought, 'Well I don't know what I'm going do. This is crazy.'</p>			<p>home. However, in the face of intolerable (physical) discomfort and a sense of inefficacy that her behavior could bring about a conventional way to urinate, P2 felt compelled to use a less conventional way to satisfy her imminent need to urinate without being seen by others— on the shoulder of the highway. P2 implied that urinating in this way was undignified, and she was relieved by the knowledge that no one saw her do it.</p>
<p>23A. ...And I thought, no, no, no, you know, keep telling, 'Oh you can make it, you can make it', and I thought, 'No I can't make it. This is ridiculous.' So I actually pulled off to the side of the shoulder. I got out of my car, walked around the front of the car, opened up the passenger side door and squatted in front of the passenger side door, 'cause I figured, okay, the people behind won't be able to see, they'll just see the door and the people on the other side, there was too much of a storm anyway and just squatted and went to the bathroom, because I just, otherwise I was going to bust. <b>I.:</b> Okay, okay.</p>	<p>23A. Initially, P2 encourages herself that can wait a little longer before voiding and make it to a toilet without having any accidental leakage. Then, feeling as if her bladder was going to burst, she deems it senseless to delay urination any longer. Upset and distressed, P2 pulls her car onto the highway shoulder to urinate. Not wanting to be seen while voiding by other people, P2 vacates the driver's seat of her car and squats to void between her open passenger side door and her car.</p>	<p>23A. P2 acknowledged that, despite feeling a desperate need to void, she initially tried to delay voiding until she reached her destination. Then, when it became so physically uncomfortable for P2 to delay voiding any longer, she pulled her car to the side of the road and positioned herself to urinate so that other commuters could not see her.</p>	<p>home. However, in the face of intolerable (physical) discomfort and a sense of inefficacy that her behavior could bring about a conventional way to urinate, P2 felt compelled to use a less conventional way to satisfy her imminent need to urinate without being seen by others— on the shoulder of the highway. P2 implied that urinating in this way was undignified, and she was relieved by the knowledge that no one saw her do it.</p>
<p>23B. <b>P2:</b> So, that is real distressing, is to be in traffic and it's, you know, it can be embarrassing when you have to go to the bathroom when nobody else has to, but if you cannot get to the bathroom that's really distressing.</p>	<p>23B. P2 states that she feels embarrassed when she has to go to the toilet to urinate when other people in her company don't have to go. However, for P2, she experiences severe distress when she needs to void and feels powerless to reach a toilet to do so.</p>	<p>23B. P2 stated that she becomes quite distressed and embarrassed when she needs to go to the toilet and other people don't have to, but even more distressed when traveling in a car through traffic and is not able to get to the bathroom.</p>	<p>23B. P2 stated that she becomes quite distressed and embarrassed when she needs to go to the toilet and other people don't have to, but even more distressed when traveling in a car and feeling ineffective when she is unable to locate a bathroom.</p>
<p>24. <b>I.:</b> Uhuh, uhuh, yes, yes. Thank you. So actually, that's fabulous. Thank you so much for describing your normal day in both forms, because they're very different, the consulting day and home day, the working-at-home day. Now, just to shift to the second part of the interview, I'm wondering now, if you could call to mind a</p>	<p>24. In response to I.'s query, P2 recalled a humorous situation occurring 3 to 4 years ago when she was running and experienced an extreme amount of urinary urgency. She had taken up running as a sport, which she enjoyed a great deal, and practiced about 4 to 5 times per week.</p>	<p>24. In response to I.'s query, P2 recalled a situation where she had an extreme amount of "urinary urgency" while running a few years ago.</p>	<p>24. P2 recalled a second instance of "urinary urgency" while running a few years ago.</p>

<p>situation where you've had an extreme amount of urinary urgency, and I'm interested to hear in as much detail as you feel comfortable sort of taking me through what that event was like for you?</p> <p><b>P2:</b> Okay, well I'll you the most, and it's almost laughable. I mean, when I got home from it and told my sister we just roared.</p> <p><b>I:</b> Really.</p> <p><b>P2:</b> About how ridiculous this is...but I had been, this is probably about three, four years ago, and I had taken up running. I was running like 4 or 5K four or five times a week. And it was like, 'Yeah, this is really cool'.</p>			
<p>25. And I went away on vacation with my husband down to his hometown in New Brunswick, and they had a, and his brother is a runner, his brother is a marathon runner, and I was saying, 'Oh yeah, I'm running, blah, blah, blah'. And he said, 'Well, you know', he said, '...there's a 5K run this weekend, why don't we do it?' And I thought, 'Yeah, no problem, this will be great'. And so we got all ready and everything and we're out there. Well, I've never, I had only run on my own. I had never run in any kind of race, so I was asking him, you know, 'what do you do', 'how do you prepare' and all that. He said, 'Don't wear yourself out, but just trot around a little bit get nice and warmed up and all that stuff', and he said, 'oh', and he said, 'Drink plenty of water'. He said, 'Because it's going to be hot, and you'll, and they'll have water along the way, but you've got to drink plenty of water'. Well I was just never even thought about that, and I thought, 'okay, yeah, yeah', so I guzzled down two full bottles</p>	<p>25. P2 recalled that, while on vacation with her husband, she was invited by her brother-in-law to participate in a 5K run with him. Having been regularly running, P2 anticipated enjoying this race. P2 stated she was uncertain about how to prepare for the race, and was informed by her brother-in-law to warm up before running and to drink plenty of water to keep herself hydrated in the hot weather. P2 stated that she had not given any consideration to the need for staying hydrated, and took her brother-in-law's advice by guzzling down two bottles of water before the race began.</p>	<p>25. While on a vacation in another province with her husband, P2 agreed to participate in a running race with a male family member. P2 had prior experience running privately but not in races, and she felt uncertain about how to prepare. P2 took the advice of her race partner about drinking plenty of water to stay hydrated in the hot weather, and quickly consumed two bottles of water before the race began.</p>	

of water before the thing started.			
26. So they said, 'Okay, all right get ready, set', you know, we're all, 'go'. We're all lined up there and I started running, trotting, you know running and it started leaking out and just, I mean, pouring out. Like I'd never experienced anything like that ever.	26. After the race started, P2 begin running and noticed that the urine started to leak out very quickly, unlike anything she had experienced before.	26. P2 felt urine leak out as she started to run, and its rapid flow was unlike anything she had experienced before.	26. P2 was surprised by the rapidity of the urine flow released from her body as she began to run.
27. And it just, I could feel it and I thought, 'Oh no, oh no, oh no' and we're at the beginning of the race and there are cars all around and there are people cheering and the streets are lined with people and they're all watching us and I've got this cute, little short outfit on and the whole thing, and I can feel it just flooding, just flooding down my pant, I can feel it coming down my leg, I can feel it, just like flooding. It was just the worst, if it wasn't just so crazy, it would be just like this biggest nightmare of my life.	27. As P2 felt the urine flooding down on her clothing and body, she was horrified. P2 implied that she became self-conscious about the urine leakage and her soaked clothing, when she noticed the people lining the street race route, watching and cheering for the participants, and the wetness of her treasured new running outfit. For P2, this experience was very bizarre and just dreadful.	27. P2 felt a sense of horror and dread as the urine poured out of her and saturated her treasured new running outfit in front of the race spectators. For P2, this was the worst nightmare of her life.	27-28. P2 felt a sense of dread and horror as the urine poured out of her and saturated her treasured new running outfit in front of the race spectators. P2 expressed frustration about the lack of options to deal with the extensive wetness that could not be concealed from others. For P2, this was the worst nightmare of her life, however her sense of anonymity in the town provided some relief for her.
28. Fortunately I don't know anybody in that town, but it was just, I thought 'Oh my God, oh my God, what am I going to do!' And I had no choice, by the time I realized the seriousness of what was happening, we were on a bridge going from one section to another, so there was no turning back, there was no like stopping and saying, 'Oh sorry I can't do this', there's no bathroom in sight anyway, because we started in the middle of a park and we were running over a bridge, so it's not like I could have said, 'Oh here, I'll just go to the bathroom'. Just flooded all down my legs, all down the back of my shorts, like I was just, it was as if somebody had squirted me. It was horrible. I just thought nothing worse could happen in the world.	28. P2 expressed relief in the knowledge that she did not know anyone in the town where the urine leakage occurred. P2 expressed frustration in the lack of options she had to handle the situation. She had traveled too far to turn back or stop participating, and she was unable to locate a toilet to use. P2 noted that the urine leaked was extensive and very visible to others, covering her shorts and leg, so she was unable to cover or hide the wetness. For P2, nothing worse could have happened to her.	28. P2 stated that the leaked urine had covered most of her clothes, and it was horrible because she was unable to conceal the wetness from others. P2 stated that by the time she became aware of the severity of the urine leakage, she did not see any satisfactory way of dealing with the situation (turning back, opting out). P2 was relieved by her sense of anonymity in the place where the episode occurred, and felt that there was nothing worse that could happen to her.	
29A. Anyway, got across the bridge and started coming in to this other section and I could see that there was a gas station	29A. P2 stated that she continued to run in the race, and directed herself towards a gas station up ahead, so that she	29A. P2 anticipated having an opportunity to use a toilet when she saw a gas station come into	29A. P2's initial anticipation of using a toilet that came into view

<p>up ahead and, how did it go? I see that there was a gas station, but again, once we got in to that place, there was people standing all around. And there's like, 'Yeah!'</p>	<p>could use the bathroom. P2 expressed disappointment about arriving at the gas station, given that she noticed numerous people standing in the area and did not want to be seen with her soaked clothing by them.</p>	<p>view, but as she approached the area, she became afraid that spectators would see her in the urine-saturated clothing.</p>	<p>dissipated when she noticed the race spectators that lined the route. P2 feared that spectators would see her in the urine-saturated clothing and cancelled her plan to use the toilet.</p>
<p>29B. And I thought, 'Well I can't stop', you know, my husband is clicking pictures and the whole thing, and I said, 'Okay my only saving grace is it's blistering hot out here' and people are.....there's water, they've got water all around, and so I went by the first water thing I could, and took it and just threw it all over me. So that I, water everywhere, so that it looked like I was just drenched in water. But, the truth of it, I was drenched in pee, just drenched.</p>	<p>29B. P2 stated that she couldn't stop running in the race, because her husband is watching, taking pictures and so proud of her. So, frantically looking for a way to resolve the situation, P2 noticed the water available at an upcoming water station and decided to throw water on her clothes. In doing so, P2 made it appear to others that her clothes were soaked with water, but she remained fully aware that she was drenched in urine.</p>	<p>29B. P2 resolved to continue running in the race, and looked for ways to make the situation more palatable. At the first opportunity, P2 took water from the station and threw it on her clothes to disguise the urine wetness already on her clothing. While P2's actions eased her discomfort about others seeing the wetness in the crotch area of her clothes, she remained fully aware that she was drenched in urine.</p>	<p>29B. P2, who resolved to stay in the race, disguised the urine wetness on her clothing by throwing water on the area. Although P2's actions offered partial relief of her discomfort by concealing her indiscretion from others, they were not sufficient to restore her sense of self-respect.</p>
<p>30. And it just kept coming; it was almost like when it started there was just no stopping it. It was a very interesting thing, 'cause that had never happened, you know, to me, and there was just no stopping it, period. <b>I.:</b> So it was just flowing as you were running? <b>P2:</b> It was flowing as I was running, not dribbling or drabbling, flowing as I was running and it just continued to until it was, I guess, all out. So, by the time I had gone, you went two and half and then turned around the other two and a half, by the time was coming up the other two and a half, it was almost dry. So, I don't know how I smelled at the moment, but you couldn't really see it by the time I got into the finish line and the awards and the whole nine yards. I don't</p>	<p>30. P2 stated that the urine leakage, once it began, seemed to flow out of her and she felt powerless to stop it. P2 estimated that the urine leakage ended when her bladder was completely empty. By the last half of the race, P2 stated that her wet clothes had dried in the heat and she was confident that no one would see the wetness. P2 acknowledged a lingering concern about whether other people detected an odor of urine around her. P2 stated that she didn't believe anyone noticed her leakage accident, and her husband did not mention anything about it to her.</p>	<p>30. P2 stated that the urine continued to leak out as she ran until her bladder was completely empty. As P2 completed the last half of the race, her clothes no longer revealed any wetness, but she remained concerned that others would smell an odor of urine around her. P2 perceived that no one noticed her leakage accident, including her husband, who did not mention anything about the incident. For P2, it was the most extreme experience she has had urinating.</p>	<p>30. During the last half of the race, P2's clothes no longer revealed any wetness, which provided some relief, but she remained concerned that others would smell an odor of urine about her. P2 believed that no one noticed her leakage accident, including her husband, who did not mention anything about the incident. For P2, it was the most extreme experience she has had urinating.</p>



<p>know that anybody ever noticed. You know, my husband never said anything, but it was just unbelievable. I thought, ‘Oh, well, this is going to be America’s funniest stories’. So that was the most extreme experience I’ve ever had with urinating.</p>			
<p>31A. <b>I:</b> Yes, yes. And was there a sense of urgency at all before the flow started at the beginning of the race, did you have any sensation there? <b>P2:</b> Well, no, ...</p>	<p>31A-31B. In response to I’s inquiry regarding P2’s experience of a sensation of urinary urgency before the race, P2 reported that she did not. P2 stated that as she was guzzling the water before the race, she became concerned about the extent of bladder fullness and her need to urinate. P2 stated that she went to urinate three times before the race started to make sure her bladder was empty. P2 noticed that very little urine came out, and she initially experienced relief that her bladder was empty.</p>	<p>31A-31B. In reply to I., P2 stated that she did not experience a sense of “urinary urgency” before the race, but she was concerned about needing to use the toilet, given the amount of water she had consumed. So, P2 used the toilet three times to make sure she had emptied her bladder before the race, and the small amount that she voided each time reassured her that she would not need to use the toilet later. But when P2 started running, and saw the urine pour out of her body, she then realized that the water she had ingested had not made it through to her bladder before the race began.</p>	<p>31A-31B. P2’s sense of “urinary urgency” arose after urine began to pour out onto her clothing while running. Before the race, P2 had made several trips to the toilet out of concern for the extent of bladder fullness because of how much fluid she had ingested. Before the race, P2 was relieved when she voided small amounts of urine because it suggested to her that her bladder was effectively “empty”. After the leakage incident, however, P2 realized that the small voids had an entirely different meaning - that the ingested water had not made it through to her bladder before the race.</p>
<p>31B. ... you know, I was guzzling this water you know, and everyone’s trotting around and stretching and everything, and I thought, ‘Okay I better go to the bathroom, I better make sure’. So, I went to the bathroom like three times before we got ready. But of course all that water hadn’t quite made it through yet. I think was the problem. Because we had, I don’t know, whatever a half an hour to warm up, and so I think the water just hadn’t made it through. So, I’d go to the bathroom, there wouldn’t be much there and I’d think, ‘Okay no, I’m good, I’m good’. And then as soon as I started running, like a half a block and it was just flooding. <b>I:</b> Oh my goodness.</p>	<p>However, P2 reflected that her relief turned into panic after urine began leaking out when the race started. P2 stated, in hindsight, that the small pre-race voids indicated that the ingested water had not made it to her bladder in the time that elapsed between drinking it and starting the race.</p>		
<p>32. <b>P2:</b> So it was just like, ‘Oh, great’. <b>I:</b> Yes. So down your leg, sort of in to your socks and shoes and...? <b>P2:</b> Oh yeah, completely, just washed in it. <b>I:</b> [laughs] <b>P2:</b> It was just horrible, it was</p>	<p>32. P2 stated that she was just completely covered in urine in this situation, which was so embarrassing. P2 indicated she felt relieved by the knowledge that the situation did not occur in a place where she would have known people or possibly been seen in wet shorts by</p>	<p>32. For P2, being covered in urine in front of others aroused feelings of embarrassment and dread. P2 sense of anonymity in the city where it happened seemed to alleviate any threats to her sense of dignity (esteem), but she</p>	

<p>just laughable, it really was, had it not been so embarrassing. Fortunately, had that been my own hometown, I don't know what I'd have done, but I didn't know a soul.</p>	<p>people she knew. She stated that she was unsure how she would have handled the leakage if people she knew witnessed the event.</p>	<p>was aware that the impact would have been more detrimental if she had been in her own hometown.</p>	
<p>33. <b>I:</b> Yes, yes, any other thoughts or feelings? You've mentioned embarrassment, I mean there are some thoughts that it sort of doesn't matter because you don't know anyone there, sort of anonymous, but anything else? Did you think of anything else at the time?  <b>P2:</b> Well, I was ticked off. I was just mad. I thought 'this is ridiculous'. This is my big chance to, you know, I actually won. <b>I:</b> [laughs]  <b>P2:</b> [laughs] I won in my age category, you know, which is old, but yeah. So I thought well, this is crazy, you know. This never happens to me at home. So, I guess, in terms of emotions I was surprised, 'Hey this never happens to me at home' and just ticked off. Like, jeesh. You know, 'can't even run'. And this was pre-doing all the Kegels and stuff, so it was.... I don't know if it would happen today. I suspect it still would be a problem guzzling down two full bottles of water right before you're ready to run.</p>	<p>33. In response to I's inquiry regarding P2's feelings about the urine leakage, P2 stated that she was both angry and surprised. P2 was angry that her sense of satisfaction in winning the race within her category was invalidated for her by the experience of leaking urine in front of other people. P2 implied that she felt incompetent, like she was unable to do anything, including running, capably. P2 also stated that she was surprised by the leakage, which has previously not happened to her while at home. P2 expressed uncertainty about whether urine leakage of this magnitude would happen in the future. P2 implied that the strengthening of her pelvic muscles might avert similar instances of urine leakage, however, she predicted that drinking two full bottles of water just before running would likely lead to the same result.</p>	<p>33A. In response to I's inquiry regarding P2's feelings about the urine leakage, P2 stated that she was both angry and surprised. P2 was angry that her sense of satisfaction in winning the race within her category was invalidated for her by the experience of leaking urine in front of other people. P2 implied that she felt incompetent, like she was unable to do anything, including running, capably. P2 also stated that she was surprised by the leakage, which has previously not happened to her while at home.</p> <p>33B. P2 expressed uncertainty about whether urine leakage of this magnitude would happen in the future. P2 implied that the strengthening of her pelvic muscles might avert similar instances of urine leakage, however, she predicted that drinking two full bottles of water just before running would likely lead to the same result.</p>	<p>33A. P2 was angry that her success in winning the race was overshadowed by her feeling of incompetence in controlling (regulating) urination. In reply to I., P2 acknowledged that she was surprised by the urine leakage, since a leak of this magnitude had not previously happened at home.</p> <p>33B. P2 expressed uncertainty about whether urine leakage of this magnitude would happen in the future. P2 perceived that the pelvic floor strengthening exercises had given her a greater ability to regulate urination, but that leakage was likely to be a problem if she drank a similar amount of water before running.</p>
<p>34. <b>I:</b> Yes, yes. And I'm wondering what this event, what meaning this event had for you? I guess sort of over the long term, what sort of personal meaning you derived from it?  <b>P2:</b> [laughs] Well, it means life sucks, I think...No, I think it's,</p>	<p>34. In response to I's inquiry regarding the personal impact of the urine leakage, P2 expressed how terrible her life is with the omnipresent threat of urine leakage. Switching to a lighter note, P2 added that in the moment she was</p>	<p>34. In reply to I., P2 acknowledges that the urine leakage was quite distressing and embarrassing when it happened, and because of her commitment to continue running, she felt</p>	

<p>I have a pretty good attitude, I think, in life about a lot of things, and at the moment, of course, it was really distressing, and I thought ‘Oh, this is embarrassing’, this is, you know, ‘What am I going to do?’ I think, for me what it meant was, or what I took from it was, I probably really need to do something about this. Because at the time I was really committed to running and I thought I’m going to run, if I’m going to continue to do this, you know, I need to take care of that. So I just saw it as, you know, an impetus to say, get this handled.</p>	<p>embarrassed and distressed, but over the longer term, the leakage motivated her to seek health care to have this problem assessed and treated, especially considering that she planned to continue running in the future.</p>	<p>motivated to see a healthcare provider to take care of the problem.</p>	
<p>35. <b>I:</b> Uh-uh. And what happened next in terms of after the run? <b>P2:</b> Well, that’s when I, I think I mentioned it to the, well I didn’t tell him what happened, but I said to the, to my gynecologist you know, I’ve got to figure this thing out, this is not okay. And he said ‘All right, well send you off to the specialist’ and all that. So it wasn’t long before I was seeing Dr. [NAME OF UROLOGIST] and everything.</p>	<p>35. P2 stated that she went to see a gynecologist and, although she did not disclose this specific event of urine leakage to him, she did report having a problem and wanting to find a resolution. She received a referral to see an urologist for an assessment.</p>	<p>35. P2 was referred to an urologist by her gynecologist, whom she informed about the urine leakage problem and her desire to figure it out. P2 acknowledged that she did not reveal the details of the urine leak at the running race to her gynecologist. P2 implied that her feelings of embarrassment about the urine leakage prevented her from disclosing the incident to her doctor.</p>	
<p>36. <b>I:</b> And up until that time, before the running event happened, you hadn’t had an experience like that before? <b>P2:</b> No, no. I mean I’d had experiences where, I have played baseball on women’s teams for many years and at that time, let’s see that would have been, yeah, I would probably had just kind of come to the end of playing baseball in the summer. And on baseball, whenever it was baseball night, I always wore a pad, because I know if I were running from one base to the next or running to get a ball, I would definitely,</p>	<p>36. When asked by I. whether the running race was the first time P2 had experienced severe urine leakage, P2 noted that she had leaked urine regularly for about six years when she played baseball. For P2, the urine leakage was associated with rapid sprinting between bases or to catch a ball, and she regularly wore pads to contain the leakage. On several occasions, P2 arrived to play baseball without having pads to wear, and she slowed down her running speed to avoid urine leakage that would inevitably become visible to others at the</p>	<p>36. In reply to I., P2 acknowledged that she regularly experienced urine leakage when she played baseball over a period of six years. She managed by regularly wearing pads to contain any leaks, which became a problem if she forgot to bring them. P2 implied that her performance in the game was less effective when she didn’t wear pads, because she anticipated and avoided the body movements that would bring about leaks,</p>	<p>36. P2 stated that she regularly experienced urine leakage when she played baseball over a period of six years. The leakage became a problem for P2 only when she forgot to wear pads because certain body movements could cause embarrassing leaks. During the game, P2 averted</p>

<p>definitely squirt out then. 'Cause in those situations you're just running for all your worth. It's not jogging, like I can jog and it's not a problem, but when you're flat out running it would squirt. So I was probably for five or six years there playing in the summertime on the baseball team wearing a pad every time I played. And there was a couple of times, because I was coming right from work, and blah, blah, blah and didn't have a pad and it was a big problem. It was a problem in that I basically trotted from base to base.</p> <p><b>I:</b> Oh, okay.</p> <p><b>P2:</b> Yeah, I just, I knew that if I just ran flat out it'd be a problem.</p> <p><b>I:</b> Oh, okay. So actually you ran a bit slower knowing because of the squirt?</p> <p><b>P2:</b> Yes, yes.</p>	<p>game. As a result, P2 implied that her performance in the baseball game was, on those occasions, less effective than usual due to the threat of urine leakage.</p>	<p>even when they were important for a particular sporting "play".</p>	<p>embarrassment by restraining body movements that she anticipated would bring about leakage, but her actions compromised her sense of effectiveness in the sport (baseball).</p>
<p>37. <b>I:</b> Okay. Well that's, thank you very much, that's very helpful, is there anything else that you'd like to add to the story?</p> <p><b>P2:</b> No, I think those stories can be just, other than like I said, I just, I was mortified at the moment and, but thought, you know what, this going to make a great story. <i>[laughs]</i></p> <p><b>I:</b> <i>[laughs]</i></p> <p><b>P2:</b> Telling the people that I'm willing to share it with, like my sister and stuff, it is a great story. You know, it just shows you how ridiculous things can get sometimes.</p> <p><b>I:</b> Uh-uh, uh-uh, yeah, yeah. Oh my goodness. And also how much humor you can derive from it.</p> <p><b>P2:</b> Oh well, because you just have to laugh at something like that. I mean what are you going to do.</p> <p><b>I:</b> What a great attitude, what a great attitude [NAME OF P2].</p>	<p>37. In response to I's inquiry about adding any further information, P2 noted that in the moments of urine leakage she described, she was completely mortified by what had occurred. However, in the future, she realized that these experiences would make a great story to share with others who were close to her. For P2, her urine leakage was an example of just how absurd things can get in life, and how important it is to laugh about it.</p>	<p>37. In response to I.'s query, P2 is aware that leaking urine in front of others injured her sense of self-respect. She saw humor in the absurdity of what happened to her, and sharing the humor with close others brings P2 some relief about a situation that she felt powerless to change.</p>	

<p><b>P2:</b> Well.</p>			
<p>38. <b>I:</b> I'm wondering for the great portion of the interview we've talked a lot about the experiences that you've had in more sort of the social environment and the home environment, I'm wondering if there's an experience in the work environment that you wouldn't mind describing?  <b>P2:</b> Well, let me think, I think the things that stand out for me in terms of work are the, are that problem of getting to and getting from, the idea that if it's more than about an hour, that can mean I have to stop. I can tell you where every bathroom is this side of the Mississippi, because I've staked them out. I truly know where all of them are, because you know, I just had to know. So yeah, to me that's just kind of just an overriding nuisance, the idea that oh, you know, I can't just, "let's go!" You know, 'cause I've got to know where the bathrooms are.</p>	<p>38. In response to I's inquiry about P2's experiences with urinary urgency in the work environment, P2 acknowledged that she often has a need to stop the car and find a place to urinate when traveling distances greater than one hour on her way to and from work. P2's sense of urgency in needing to use toilets at a moment's notice had led her to familiarize herself about where the bathrooms are along her usual routes. However, P2 noted that her sense of urgency to use a toilet limits her freedom to travel to unfamiliar places because she won't know where the bathrooms are located on the route.</p>	<p>38. In response to I., P2 acknowledged her annoyance about having to stop the car to urinate when traveling greater than one hour while on her way to and from work. For P2, learning the locations of available toilets along her route of travel has been a vital strategy to avoid experiencing a "urinary urgency", but she feels that her freedom is limited due to restricting travel to routes where she has knowledge of toilet locations.</p>	
<p>39A. I think with, in terms of workshops or training or whatever, there's always plenty of time for me to go to the bathroom, you know, 'cause you're in a hotel or you're in an office building. I mean there's always plenty of time to go, but it's,</p>	<p>39A. P2 stated that when she participates in workshops or training meetings, which are often located in hotels and office buildings, she has no difficulties locating a bathroom, or having sufficient amount of time to use it. P2 implies that her sense of urinary urgency is reduced in these environments, given the abundance of toilets in the immediate vicinity.</p>	<p>39A. P2 implied that she experiences less "urinary urgency" when she participates in workshops or training meetings, because she usually has close proximity to toilets in these settings (hotels, office buildings), and perceives that she has plenty of time to use them.</p>	
<p>39B. I think it's the, and this is probably tied in with my age too. Because I'm fifty-eight, so I'm nearing the end of my career. I'm speaking most of the time and training most of the time, thirty-year-olds, and I'm aware of the age difference. I'm aware of the need to keep up and be current and all that.</p>	<p>39B. P2 acknowledged that she has become more aware of her need to stay modern and up-to-date in her profession, especially as she nears the end of her career. P2 expressed that she is aware of her advancing age when she comes into contact with trainees who are considerably younger than</p>	<p>39B. P2's awareness of the age difference between herself and her trainees, and her need to frequently excuse herself from meetings to urinate, challenges her view of herself as an effective and modern professional.</p>	

<p>And for me, this need to be slipping out, going to the bathroom all the time feels old-lady-ish, you know? It's like, 'Oh yeah, right. I'm really cool, I'm really hip, I'm really with it, except excuse me every fifteen minutes while I go pee'.</p>	<p>her. P2 states that her need to frequently excuse herself from meetings to urinate challenges her view of herself as an effective and modern professional.</p>		
<p>39C. You know, so I think for me it's, image would be too strong a word 'cause I suspect no one ever sees or cares. It's all my issue, but I put it in a category of kind of, well, debilitating is too strong a word, but an issue in terms of trying to be as effective as I'd like to be in my work life. You know, so again, you're in the meeting, things are getting very important, important stuff is being talked about, you need to be listening, and all I can think about is going to the bathroom. You know, so it creates distraction in that sense, yeah, I would say that's the, the big, the long and short of it.</p>	<p>39C. P2 acknowledges that she views the problem of urinary urgency and frequent urination as an issue that is mostly a problem for her in the workplace and likely not even noticed by others around her. P2 stated that she is often distracted by her thoughts about needing to go to the bathroom while in meetings and missing out on hearing about important matters being discussed that require more of her attention than she can give. P2 implies that the continuous attention that she devotes to her urinary problems takes away from her sense of being an effective and responsive professional while at work.</p>	<p>*39C. P2 admits that the possible emergence of urinary urgency is a problem for her in the sense that it distracts her from being continuously engaged in her work. P2 tries to assess the level of difficulty that urinary urgency poses for her and she chooses "distraction" as a level between debilitating and something like nuisance. P2 implies that the continuous attention she needs to devote to her urinary problems challenges her view of herself as an effective and responsive professional while at work.</p>	
<p>40. <b>I:</b> Yes, yes. Is there an experience in the work environment that you can call to mind where you had a considerable amount of urinary urgency?  <b>P2:</b> Well, not any one particular one, but the scenario of 'Got up in the morning, got on the freeway, it's now two hours because it was supposed to be an hour trip, there was an accident, blah, blah, blah it's, you're now really, really desperate and pulling, and you're late. So, it's not like you have all the time in the world, you're supposed to be there in five minutes, you have got to go to the bathroom, and the dilemma or the toss up, do I find a gas station and stop and go to the bathroom and now I'm</p>	<p>40. In response to I's inquiry, P2 stated that she experiences urinary urgency when delayed in traffic on her commute to work. P2 expressed that under the pressure of wanting to arrive on time to a professional meeting, she feels a desperate need to void after her long commute. P2 expressed that she is faced with a no-win situation - to take time to urinate resulting in a late arrival at the meeting or to continue traveling and arrive with a desperate urge to void. Paradoxically, either decision leaves her feeling embarrassed in front of her colleagues, either through her lateness or through her request to use the toilet.</p>	<p>40. In response to I's query, P2 stated that she develops a desperate need to void ("urinary urgency") when the time it normally takes her to commute to work is extended by one or more unpredictable events (volume of traffic, accidents, etc) <i>en route</i>. In these situations, P2 feels conflicted because she is left with very little time to get to the office promptly, and yet she also needs to satisfy her immediate urinary needs. P2 feels compelled to choose between two equally unpalatable actions. On the one hand, she can immediately</p>	

<p>fifteen minutes late, or do I forge on, get to this office where I'm supposed to be, say, 'Oh hi, I'm [NAME OF P2], where's your bathroom?' You know which do you do, neither is a good option,</p>		<p>satisfy her urinary needs but displease her colleagues by being late. On the other hand, she can ignore her urinary needs to facilitate a timely arrival, but she will subsequently need to disclose to colleagues that she needs to use the toilet, which leaves P2 feeling inadequate. Urinary urgency often puts P2 in a situation where her self-image as a responsible "worker" is challenged.</p>	
<p>41. I've actually called ahead a few times, you know, probably three or four and said, 'I'm on my way, I'm running a little bit late, I should be there in about ten or fifteen', to buy me time to stop and go to the bathroom. So it's the truth I am running late, late because I have to pee all the time, but it's, you know, it's just, yeah I would say that's more of a consistent on-going theme.</p>	<p>41. P2 stated that to alleviate her embarrassment she has called ahead to inform her colleagues of a short delay in her arrival time, which provides her time to stop and use the toilet. P2 implies that she uses this method as a means to protect her sense of professionalism when interacting with colleagues, but she is aware that her lateness is due to her need to urinate all the time, which she views as a personal shortcoming.</p>	<p>41. P2 acknowledged that, occasionally, she has acted on her urinary needs immediately, and took the initiative to advise colleagues/clients that she would be arriving later than expected. P2 omitted the genuine reason for her lateness, that is, her need to urinate, which enabled her to maintain a sense of competence in relation to her colleagues. Privately, however, P2 views her urinary needs as a personal shortcoming (or inadequacy).</p>	
<p>42. <b>I.:</b> And in terms of the second option that you mentioned, or sort of the second scenario where actually walk in, you've delayed the bathroom, even though you're running late, you've delayed stopping to go to the bathroom in favor of trying to be on time, and then introduce yourself and say, 'Hi I'm [NAME OF P2], where's your bathroom?' What's that like? <b>P2:</b> It kind of depends on where you're going. I mean... I work in lots of different industries. If I'm going into a hospital or a social work setting, mostly that's middle-aged women.</p>	<p>42. In response to I's inquiry requesting more information about P2's experiences related to asking colleagues to use their toilet when arriving at work settings, P2 stated that her reactions differ depending upon the context. P2 noted that in a hospital or social work setting, she feels comfortable as she encounters mostly women of similar age and receives a relaxed and courteous response. In contrast, P2 stated that in formal work settings, where she encounters males, she is embarrassed, distressed and self-conscious about her need to void. P2 implies that when the</p>	<p>42. In response to I's inquiry, P2 elaborated that her feelings about asking colleagues about toilet use is influenced by the context. In non-corporate (public) work settings, P2 encounters women of similar age and she feels comfortable disclosing her need to use the toilet. In corporate environments, however, P2 feels uncomfortable and embarrassed when excusing herself to urinate in front of male colleagues. In these latter situations, P2's disclosure</p>	

<p>They have no, you know it's like, 'Oh yeah it's down the hall, take your time, the meeting starts later.' If you're with IBM, or you know, and you're working with all the suits, you know, it's the boardroom and it's the suits and it's men, that to me is much more troubling. Then I do feel like the old lady who's got to stop and pee, because everyone knows none of those men have peed since they were twelve.</p> <p><b>I:</b> [laughs]</p> <p><b>P2:</b> You know it's like, 'oh it's like my mother, she has to go pee all the time', or at least I assume that's what they're thinking. So yeah, that's much more problematic if it's men, if I'm encountering a group that's all men.</p>	<p>males observe her frequent need to urinate, it will diminish their view of her as competent and effective in the workplace.</p>	<p>about the need to urinate diminishes her sense of potency (strength) in the workplace.</p>	
<p>43. I try to take a humorous approach. You know, I'll just say, 'Oh, can I visit the little girls room 'cause I've been on the freeway forever?' You know, and just kind of make light of it. But still, it's just annoying. It's annoying when all the thirty-two year old women just walk right past you in to the meeting. And they also were on the freeway. We all arrived at the same time, same accident, same freeway, I've got to go to the bathroom and they don't.</p> <p><b>I:</b> Yes, yes. And so, and you know that those women will be able to sit there for another three hours without any complaints or...</p> <p><b>P2:</b> Oh of course, and have coffee while they're sitting there.</p>	<p>43-44. P2 stated that she usually copes with her embarrassment about her need to use the toilet in work settings with humor and laughter, but privately, she is annoyed. P2 implies feelings of resentment and envy toward younger women who do not share her concerns about urinary urgency, and are able to endure traffic delays and meetings without experiencing the need to void. P2 described feelings of resentment for other, usually younger, women that have the freedom to drink as much as they would like during meetings without any concerns about needing to use the bathroom. P2's concerns about her need to urinate prevent her from drinking any fluids in meetings, even if she is very thirsty.</p>	<p>43-44. P2 stated that she uses humor to cope with her embarrassment about disclosing her need to urinate to work colleagues. Privately, however, P2 feels envious of younger female colleagues whom she perceives as able to endure meetings and commutes without any concerns about the need to urinate. Moreover, P2 expressed irritation about restricting her beverage consumption during meetings, even when her thirst is unsatisfied, so that she can continue to contribute and feel effective in the workplace.</p>	<p>43-44. P2 stated that in order for her to feel effective in work meetings, she restricts her fluid consumption to avoid needing to take breaks to use the toilet, even when her own thirst is compelling. P2 acknowledged feeling envious of younger women whom she presumes do not experience the urinary problems she has (frequency, urgency) and whom she views as "free" to consume fluids <i>ad libitum</i> in this context.</p>
<p>44. That's the other thing, it's like oh would you like some</p>			



<p>coffee or water? Oh ‘no thanks’, and meanwhile, I’m parched and dry, but you don’t dare drink while you’re doing all this, so. Yeah.</p>			
<p>45. <b>I.:</b> Is that the part of it where it’s a bit of a nuisance too?  <b>P2:</b> Well it is a nuisance, I find it a nuisance that way on trips. I mean, I love nothing better than to be in my car, with my diet Pepsi and the music blaring and off down the road. But if I’m sipping on my diet Pepsi, that means I’m going to have to stop about every forty-five minutes to an hour. Well, it takes you a while to get somewhere if you’ve got to keep stopping. So on trips, now if I’m with myself, I’m like yeah, ‘whatever’, I’ll just stop. If it’s with my husband, well then you’ve got to negotiate those stops, so it’s even more problematic. But, yeah I find it, in traveling, a pain in the butt.  <b>I.:</b> Yes, yes, yes, well thank you, that concludes the end of the interview [NAME OF P2].</p>	<p>45. P2’s annoyance about the loss of freedom to drink fluids is also experienced when she drives on personal trips. P2 stated that she enjoys drinking diet Pepsi freely as she drives her vehicle, and that, as a consequence, she will need to stop every hour or so which increases her travel time to reach a destination. P2 expressed that she is not bothered by frequent stops when she traveling alone in her car, but she will restrict her drinking habits when her husband travels with her to avoid annoying him with frequent stops to urinate.</p>	<p>45. P2 stated that she enjoys drinking beverages <i>ad libitum</i> while driving in her non-work (personal) time, and she will extend the time needed to travel because she will need to stop more frequently to urinate. However, when P2 drives with a companion in the car, she restricts her beverage consumption to reduce the number of stops (to urinate), which she presumes would annoy her companion. For P2, the restrictions to her lifestyle that result from her urinary needs are a nuisance, and become even more problematic when others’ needs have to be taken into account.</p>	<p>45. When P2 is driving on her personal time, she enjoys the freedom of drinking beverages <i>ad libitum</i>, even though the increased urination frequency and overall travel time will be a nuisance for her. When P2 is driving with a companion, however, she presumes that her urinary needs will annoy others, and so she restricts fluid intake to suppress them.</p>

***Analysis of P3's Transcript***

<p><b>P3's Verbatim Transcript Separated Into Meaning Units</b></p>	<p><b>Psychologically Sensitive Expressions (Highlighting Relevant Psychological Sensitivity to Phenomenon)</b></p>	<p><b>Second Transformations (To Enhance Psychological Sensitivity to Phenomenon)</b></p>	<p><b>Third Transformations (To Further Enhance Clarity, As Needed)</b></p>
<p>1. <b>I.:</b> Today is November 23<sup>rd</sup>. I'll be meeting with WL-02-09 at 10:30. [<i>the tape is stopped</i>]  <b>I.:</b> But, no problem, excellent, so actually just to begin the interview, I'm wondering if you can describe from your earliest memory of your urgency and incontinence symptoms? <b>P3:</b> I guess I felt the dropping, the bladder dropping. I could feel it, that was my main concern and then the incontinence, that I had to go, like especially at night. I get up two or three times at night to go to the washroom.</p>	<p>1. In response to a query from I., P3 recalled that her urinary symptoms began with a feeling or sense that her bladder was physically lower in her body than it was before, which was of concern to her. P3 stated that she also had occurrences where urine released from her bladder unintentionally (incontinence), as well as a need to urinate. P3 clarified that her need to urinate was especially bothersome at night as she was awakened from sleep two or three times each night to void.</p>	<p>1. P3 recalled that one of the earliest urinary symptoms that was of concern to her was the feeling or sense that her bladder had physically dropped lower within her body (?prolapse). She also recalled having concerns about the unintentional and unexpected release of urine from her bladder (incontinence), and by the need to urinate during the night, which disrupted her sleep (2-3 times/night)</p>	
<p>2. So, that's why I had something done, that's why I had the operation, hopefully thinking that it would cure what I had. And she was, the doctor, was not just too sure whether it would or not, but she said to try it. And it didn't, it didn't help.</p>	<p>2. P3 underwent a surgical procedure that she hoped would eliminate her urinary symptoms. P3 stated that her doctor was uncertain about whether the procedure would alleviate her symptoms but that it was worth trying. P3 stated that she did not obtain any relief in her urinary symptoms after the operation.</p>	<p>2. P3 stated that she had surgery on her bladder in the hope of curing the urinary urgency and incontinence she experienced, and returning to normal sleep patterns. P3 was aware that her doctor recommended trying the surgery but was not completely certain about whether it would produce the outcome she desired. P3 stated that the surgery did not provide the relief she hoped it would.</p>	<p>2. P3 underwent a surgical procedure on her bladder to bring about a cure in her urinary urgency and incontinence symptoms and normalize her sleep patterns, but it failed to effect any change in this regard. She was disappointed that the surgery did not offer the cure she hoped for. P3 recalled that her doctor's expectations about a cure were more moderate than her own.</p>
<p>3. <b>I.:</b> So you felt a sensation like your bladder was lower in the body? <b>P3:</b> Yes, oh yes. I could feel, I could feel it, is it the bladder or something, I could feel it. In the vagina, I could feel it yes. So that's why I had something, you know, so I think something had to be done, should be</p>	<p>3. In response to I.'s query about the sensation of the bladder being lower in her body, P3 stated she could feel an internal physical mass in her vagina, which she thought may be the bladder or another organ. P3 felt that something had to be done to improve this condition. P3</p>	<p>3. In response to I.'s query, P3 clarified that she felt a sensation in her vagina, which she believed could be due to the physical presence of something internally - the bladder, another organ or something else. P3 implied that she was concerned, and possibly frightened, about</p>	<p>3. For P3, the feeling of "the bladder dropping" referred to her awareness of a physical mass in her vagina, which she believed could be the bladder or some other organ, and caused her concern. P3 felt compelled to do</p>

<p>done. <b>I.:</b> And at that time you went to see a urologist at...? <b>P3:</b> Yes, Dr. [NAME1], who's a urologist. I went to my own doctor and my own doctor suggested Dr. [NAME1].</p>	<p>received a referral from her family doctor to see an urologist.</p>	<p>what had happened in her pelvic/vaginal area, and strongly felt that something had to be done about this situation. P3 sought medical help.</p>	<p>something about it, including seeing her doctor.</p>
<p>4. <b>I.:</b> Okay, okay. And, did they mention what that was at the time? Did they give you a name for it or? <b>P3:</b> Yeah, it's apparently very common, a very common occurrence that, this urgency to urinate and that, and especially at my age, it's very common. So, I didn't hear about it, but now I have. [laughs] <b>I.:</b> Now you have, yeah [laughs] <b>P3:</b> Gosh.</p>	<p>4. In response to I's query, P3 stated that she learned from her doctors that the urgency to urinate is a very common occurrence amongst people, and especially people who are the same age. P3 stated that she had not heard about the problem before speaking with her doctor(s), and implied that she was surprised to learn the condition was so common.</p>	<p>4. In response to I.'s question, P3 stated that she learned from her doctor that the symptoms she was experiencing included an urgency to urinate and incontinence, which were very common especially amongst people in her age group. P3, who had no prior knowledge of these matters, was surprised to learn that these problems were so common.</p>	<p>4. P3 was surprised to learn from her doctor that the urinary urgency and incontinence symptoms she experienced were a very common occurrence, especially amongst people in her age group.</p>
<p>5. <b>I.:</b> And what was your urgency like then, at the time that you first noticed the symptom that your bladder had dropped? <b>P3:</b> That I had to go more often and sometimes, in fact, I wear pads now because I never know.</p>	<p>5. In response to I's query about what P3's urgency was like when she first noticed the feeling that her bladder had dropped, P3 stated that she had a need to urinate more often than before and sometimes, she wears pads because she is uncertain about whether she will leak urine unexpectedly.</p>	<p>5. In reply to I.'s question, P3 affirmed that she was experiencing urinary urgency at the time she became aware of a sensation of "dropping" in her vagina. P3 stated that her "urgency" initially involved a more frequent need to urinate, whereas now the "urgency" is associated with feelings of uncertainty regarding whether the urine will leak out unexpectedly (incontinence). P3 stated that her uncertainty about when urine may flow out leads her to occasionally wear pads, which protect against any untoward consequences associated with the leakage. P3 implied that the quality of her "urgency" has worsened over time.</p>	<p>5. P3 implied that her sense of urgency has worsened over time. When she first became aware of the feeling that her bladder "dropped" in her vagina, her sense of urgency involved a more frequent need to urinate. At present, P3's sense of urgency involves occasional urine leakage that is both unintentional and unpredictable. P3 lives with a constant sense of uncertainty about when the urgency and urine leakage may occur, and she wears a pad to protect against the untoward consequences should it occur.</p>
<p>6. Sometimes I get up and I have to go so badly that I didn't get to the washroom. I don't have time to get to the washroom, so I wear a pad all the time now. Umm, only as I say because, sometimes the urgency is so great that I can't</p>	<p>6. P3 stated that sometimes when she gets up from a seated posture, her need to urinate is so intense and immediate that she begins to release urine before she is able to get to a toilet. P3 implied that she is motivated</p>	<p>6. P3 stated that, at times, she perceives such an intense need to urinate after standing up (from a seated position) that the urine begins to flow out of her body (incontinence) as she is <i>enroute</i> to the toilet. P3</p>	<p>6. P3 experiences urgency when she stands up (from being seated) and perceives that an unintentional flow of urine has begun. For P3, the urine flow cannot be controlled, and she is</p>

<p>get, and I don't have that far to go to the washroom at home, but even when I'm out sometimes its,</p>	<p>to wear pads to capture urine that is unintentionally released before she is able to reach a toilet. P3 stated that sometimes her need to urinate is so pressing that even when the toilets are in close proximity to her, like at home, she will still release urine before she is able to reach them.</p>	<p>stated that she presently wears a pad at all times because the urgency is so strong that she will leak urine even if the toilet is only a short distance away.</p>	<p>desperate to reach a toilet before she wets her clothing. However, P3 is often unable to get to the toilet without wetting herself, even if it is in close proximity, so she wears a pad at all times to contain the urine leakage.</p>
<p>7. and the thing is too that I can't control it as much as I used to be able to, you know, if you have to go to the washroom.</p>	<p>7. P3 stated that, when she feels the need to urinate, she is less able to control when the urine comes out of her body compared to years ago.</p>	<p>7. P3 stated that she feels less able to control when and where she urinates now compared to years ago.</p>	
<p>8a. And I was a teacher and somebody was telling me that maybe that's why, because I couldn't go all the time, I had to hold it for so long.</p>	<p>8a. P3, a retired teacher, stated that someone suggested to her that her urinary symptoms might be related to the long periods of time she had to hold onto (contain) urine as part of her occupation.</p>	<p>8a. P3, a retired teacher, stated that someone suggested to her that her urinary urgency might be related to the long periods of time she went without urinating due to the limited opportunities to use the toilet while on the job.</p>	<p>8a-9. P3, a retired teacher, recalled that she was able to successfully regulate urination in the workplace, where opportunities to use the toilet were constrained due to her responsibilities. In response to the suggestion that P3's urgency might be related to the long time periods she went without urinating at work, she contemplated whether there were times when she felt the need to urinate and deliberately postponed doing so ("holding back"). P3, who admitted the limits of her memory because of the many years that have elapsed since teaching, stated that if she had "held back" urination while working, she would not have done so deliberately. P3 stated that she does not know what brought</p>
<p>8b. I don't know, I have no idea. <b>I:</b> That somehow that the symptoms that you have now are connected to those years that you held... <b>P3:</b> Yes, and I was teaching upstairs and you can't leave the classroom, you know, by yourself if I had to, so you have to keep it, you have to hold on to it until you get out, downstairs.</p>	<p>8b. P3 stated that she doesn't know what brought about her urinary symptoms. P3 recalled that her position as a teacher meant she could not leave children in the classroom unattended, even to use the toilet. P3 stated that she taught her classes on a floor of a building that did not have a toilet, and she had to hold onto (contain) the urine in her bladder until class was finished and she was able to get to the toilet located a floor below.</p>	<p>8b. P3 stated that she does not know what brought about her urinary symptoms. She implied that, as a teacher, she had to regulate when and where she used the toilet (to urinate) because there were periods of time in which she was unable to leave what she was doing, and when the location of the toilet was not within close proximity. P3's recall of regulating her urinary needs successfully in a context where toileting opportunities were less frequent draws attention to the extent of urinary "control" she has experienced in the past, and is now a struggle for her.</p>	<p>who admitted the limits of her memory because of the many years that have elapsed since teaching, stated that if she had "held back" urination while working, she would not have done so deliberately. P3 stated that she does not know what brought</p>
<p>9. <b>I:</b> And what do you think? Did that make some sense to you? <b>P3:</b> It made some sense, but thinking back I, but who knows, who knows at that time? Maybe I held it back,</p>	<p>9. In response to I's query about a potential relationship between her current urinary symptoms and limited past opportunities to urinate when teaching students, P3 stated</p>	<p>9. In response to I.'s query about P3's perspective on the link between her current urinary symptoms and the limited access to toilets during her tenure as a</p>	<p>and re-iterated that it was a common condition for women her age.</p>

<p>but not even thinking about it, not even thinking about it. <b>I.:</b> So it wasn't something you did consciously? <b>P3:</b> No. <b>I.:</b> To hold the bladder when you were teaching? <b>P3:</b> No, not that I can remember, and I've been retired for a few years [laughs]. I took early retirement too. So I don't know. I have no idea, but apparently it is very common, and especially in women my age or whatever.</p>	<p>that the idea made some sense but that she does not know what happened to her. P3 stated that if she postponed her need to urinate when she was teaching students, it wasn't something she deliberately decided to do. P3 clarified that some years have passed since she was teaching and so, she does not clearly remember details about whether or how she postponed urination when teaching. P3 reiterated that urinary urgency is a very common condition for women her age.</p>	<p>teacher, P3 contemplated whether the conditions required her to postpone the need to urinate ("hold back"). P3 stated that if she had postponed urination, she did not believe that she did so deliberately. P3 acknowledged that it was hard to remember how she responded to the urge to urinate in the workplace because it took place so many years ago, and thus, she could not be certain about it. P3 reiterated that urinary urgency is a very common condition, especially for women her age.</p>	
<p>10. <b>I.:</b> How often as a teacher would you have been able to use the facilities? <b>P3:</b> Well, the thing is, that I, well unless I was out, which wasn't, you know outside with the kids, I could. Like I mean 'cause you start school and then there was recess, and which I probably didn't go because I was doing something in that, and then lunchtime. So I probably went at lunch, at least once there, and then after school. <b>I.:</b> Okay. <b>P3:</b> So, but whether I consciously held back or not, I can't remember. I can't remember.</p>	<p>10. In response to I.'s query, P3 stated that she had opportunities to use the toilet throughout the day, unless she was outside with the children. P3 implied that she often was not outside with the children. P3 stated that her first break from teaching came at morning recess, but she probably did not urinate at that time because she was involved in other activities. P3 stated that her next break from supervising children came at lunch hour, and she probably urinated at least once during this time. P3 stated that she also went to urinate after classes were over. P3 stated that she does not recall whether there were times when she needed to urinate at work and deliberately postponed doing so.</p>	<p>10. In response to I.'s query, P3 stated that she did not perceive any limitations to toilet access during her workday, unless she had stepped outside of the school with the students (occurring rarely). P3 recalled that she urinated at least once at lunchtime and also at the end of the day after class ended. P3 stated that she does not recall whether there were times when she needed to urinate at work and deliberately had to postpone doing so. P3 implied that she did not recall any intense urges to urinate or other urination-type difficulties when she worked as a teacher.</p>	<p>10. P3 recalled that she was able to control when and where she urinated while working as a teacher. She urinated during regularly scheduled breaks (recess, lunch, end of workday) without difficulty or distress, and did not perceive that her toilet access was limited during the workday, except when she stepped outside of the school with the students (rare). P3 re-iterated that she did not recall whether there were times when she needed to urinate at work and deliberately "held back" doing so.</p>
<p>11. <b>I.:</b> And so approximately when, a couple of years ago, or five years ago, when did you notice the symptom of your bladder dropping and the urgency? <b>P3:</b> Ah, let's see, about three years ago, three, four, three and a half, four</p>	<p>11. In response to I.'s query, P3 stated that she noticed a feeling that her bladder or another organ was physically lower in her body, as well as an urgent need to urinate, about 3 or 4 years ago.</p>	<p>11. P3 became aware of urinary urgency, as well as the feeling that her bladder or another organ was physically lower in her body, about 3-4 years ago.</p>	

years. That the bladder, well something dropped, and then the urgency to go.			
12. <b>I.:</b> And were you at that time when you first noticed the symptom were you, when you had the urgency, were you already beginning to experience leakage or did that happen a little later? <b>P3:</b> No, right away. <b>I.:</b> Right away. <b>P3:</b> Yep, yep, it seemed to, that I can recall, it seemed to be right away like that. I, I couldn't get up from the couch and the washroom was not that far away at home. Because I live in a townhouse, so it wasn't that far away and I, you know sometimes I made it and sometimes I didn't. Most of the time I didn't.	12. In response to I's query, P3 stated that she experienced the unintended release of urine at the same time that she felt the urgency to urinate. P3 recalled that she felt an immediate need to urinate as she rose from a seated position on a couch in her home. P3 stated that sometimes she would begin to release urine before she reached the toilet in her townhome, while at other times she was able to reach the toilet before any urine came out. P3 acknowledged that, more often than not, she was incontinent.	12. In response to I.'s query, P3 recalled that, more often than not, she experienced incontinence immediately after feeling urgency. P3 stated that she would perceive an immediate and urgent need to urinate ("urgency") after getting up from a seated position, and despite a short distance to a toilet, she was often not able to reach it before the urine started to leak out (incontinence). P3 stated that she was sometimes able to reach the toilet before any urine began to leak out, but it happened less often.	12. P3 typically experiences incontinence after urinary urgency. As she stands up (from being seated), she perceives the beginning of unintentional urine flow that she cannot control, and makes a desperate attempt to reach a toilet. Although the toilet is very close, she will usually lose urine in her clothes while <i>enroute</i> , but sometimes avoid an accident because she reaches the toilet before any leakage occurs.
13. <b>I.:</b> The, I'm wondering if you could, I know we talked about it just a bit before the tape started, but can you tell me what happened with the treatment that you received with Dr. [NAME1]? <b>P3:</b> I went in for a day surgery to put a sling in, and she wasn't too enthusiastic about it, about doing it, but I wanted it done because I thought that would help,	13. In response to I's query about treatment, P3 stated that she underwent an outpatient surgical procedure to have a bladder sling put in by her urologist. P3 stated that she wanted the procedure because she anticipated it would relieve her urinary symptoms. P3 understood that her urologist did not share her views about the anticipated benefit that would result from the surgery.	13. In response to I.'s query, P3 stated that she had a bladder "sling" procedure because she anticipated it would relieve her urinary symptoms. P3 believed that the urologist did not share her optimism about the outcome of the procedure.	
14. and when she doing this she also cut my, just a little bit, my bladder. So I was in the hospital for three days I think afterwards because of that, because she wanted to make sure that there was no leakage.	14. P3 stated that the surgeon made a small cut in her bladder during the operation, and she remained in hospital for about three days to ensure that her bladder had healed and was not leaking urine into her abdomen.	14. P3 stated that her bladder was injured (cut) by the surgeon when the sling was created, and as a result, she remained in hospital for an additional three days to ensure it had healed.	14-16. P3 endured several unwanted side effects when she underwent a surgical procedure to create a "sling" for the bladder. During the surgery, her bladder was injured (cut) by the surgeon, which necessitated three additional days in hospital to heal. Also, P3 had to begin standing so that she could urinate (before she would sit on the toilet), which is very
15. And then when I got home I took, I can't seem to remember whether it was all right for the first little while or right away, I had to stand to urinate. I can't, that I can't put my fingers on tight away, you	15. P3 stated that after having the sling procedure, she was only able to urinate from a standing position. P3 stated that she was unable to recall whether she made this change in her posture to	15. P3 currently urinates from a standing position. P3 implied that she previously sat on the toilet to urinate, but that a change to her posture was required to facilitate urination at some point after	

<p>know whether it was a little while later or right away. But I, right now, I have to stand. <b>I.:</b> You have to stand to urinate. <b>P3:</b> Yes.</p>	<p>facilitate urination right after the surgery, or sometime later. P3 stated that she does have to stand to urinate at the present time.</p>	<p>the surgery. P3 was unable to recall the exact time after the surgery at which she felt it necessary to make this postural change, but she perceived the problem to be an unwanted side effect of the procedure.</p>	<p>unpleasant for her because the urine spray goes “all over” the toilet and floor. Occasionally, she encounters a toilet that, because of its physical dimensions, enables her to void without as much of the spray that is so unpleasant.</p>
<p>16. And this, you know it’s all over [<i>laughs</i>], it’s not very nice. <b>I.:</b> Because the urine goes all over... <b>P3:</b> Oh all over... <b>I.:</b> Over the toilet... <b>P3:</b> Yes, the toilet and everything and sometimes the floor and you know. It depends on where the position of the urinal, it depends. So, you know, if it’s fine, I’m all right, if it’s not, it just goes all over. <b>I.:</b> Yeah.</p>	<p>16. P3 stated that urinating from a standing position leads the urine to spray all over, including the toilet and floor, and is very unpleasant for her. P3 stated that the physical positioning of some toilets may lessen the extent of urine spray, and ease the level of unpleasantness she experiences.</p>	<p>16. P3 stated that it is very unpleasant for her to urinate while standing, because the urine sprays “all over” the nearby toilet and floor. P3 stated that, on some occasions, the physical position of the toilets (relative to her body) ensures that more of the urine goes into the toilet rather than around it, which is less unpleasant for her.</p>	<p>16. P3 stated that it is very unpleasant for her to urinate while standing, because the urine sprays “all over” the nearby toilet and floor. P3 stated that, on some occasions, the physical position of the toilets (relative to her body) ensures that more of the urine goes into the toilet rather than around it, which is less unpleasant for her.</p>
<p>17. <b>P3:</b> So that’s, so as I said, I have to go back to Dr. [NAME1] and see. She thinks maybe a complete operation, whatever is concerned, I can’t remember what she said, might help my problem. <b>I.:</b> So like an abdominal, opening up the abdomen and putting a sling in that way? <b>P3:</b> Exactly, yes that way, yeah, rather than the other way. I don’t know. We’ll have to see when I talk to Dr. [NAME1], and see whether it’s worth it or not <b>I.:</b> Uhuh, uhuh. So you have some decisions to make, it sounds like. <b>P3:</b> That’s right, that’s right.</p>	<p>17. P3 stated that she plans to return to her urologist to discuss whether another surgical procedure might help alleviate her urinary problems. In response to I., P3 affirmed that her doctor suggested an abdominal surgery to install a bladder sling, rather than a vaginal procedure. P3 implied that she remains undecided about having this surgery, and looks forward to the consultation with the urologist to determine whether the surgery will provide any benefit to her.</p>	<p>17. P3 remains interested in dealing with her urinary problems. She learned from her doctor that an abdominal, rather than vaginal, procedure could be used to achieve the sling, but she remains undecided about having another surgery. P3 indicated her plans to consult her urologist to determine if there is any value to have it performed.</p>	<p>17. P3 remains interested, but undecided, about undergoing another surgical procedure on her bladder. She has learned that an abdominal, rather than vaginal, entry can be used to create a sling. She plans to consult her surgeon to determine the value of this procedure for her.</p>
<p>18. <b>I.:</b> Just, I’m just looking over the symptom questionnaire, do you have any...you don’t. I was just going to ask if you had any leakage of urine associated with sneezing or coughing? <b>P3:</b> No, I don’t, I don’t, that’s funny, because a lot of people have, my doctor asked me that and I don’t.</p>	<p>18. In response to I’s query, P3 affirmed that she does not experience any leakage of urine associated with sneezing or coughing (i.e., stress urinary incontinence). P3 implied that she is surprised not to experience this symptom because of how common it is amongst others.</p>	<p>18. P3 affirmed that she does not experience any episodes of stress incontinence (leakage with cough, etc), which was surprising to her because of how common she understands this problem to be.</p>	<p>18. P3 affirmed that she does not experience any episodes of stress incontinence (leakage with cough, etc), which was surprising to her because of how common she understands this problem to be.</p>
<p>19. It’s just urgency, when I</p>	<p>19. P3 stated that her main</p>	<p>19. P3 stated that her main</p>	<p>19. For P3, the main</p>

<p>have to go, I have to go right now. <b>I.:</b> So as soon as you have the sensation it's almost already too late? <b>P3:</b> Too late, yes.</p>	<p>problem is urinary urgency. She stated that when she feels the need to urinate, it requires an immediate response from her to get to a toilet. In response to I's question, P3 stated that by the time she feels the need to urinate, the release of urine from her body has already started. P3 implied that by the time she reaches the toilet, urine is often released in places other than the toilet, such as her clothes.</p>	<p>urinary problem is "urgency". She stated that she must try to reach a toilet immediately after sensing a need to urinate, because by the time she becomes aware of it, urine is often already starting to flow out of her body. P3 implied that, in these situations, urine is released in places other than the toilet, such as on her clothes.</p>	<p>problem with her bladder is "urgency". In these situations, P3 becomes aware of her need to urinate after urine has already begun to flow (without her intention to release any). She responds with a desperate rush to the toilet in the hope of getting there before the urine comes out. Typically, she does lose urine in places other than the toilet, including her clothes.</p>
<p>20. And then sometimes when I'm getting up, like if I'm sitting down watching television or something, I get up and it just flows, just for a few minutes and then I, and then sometimes when I go to the washroom I, I go, and sometimes I won't. That's what's frustrating because I leak a little bit and then when I go to the washroom, nothing, nothing happens. <b>I.:</b> Nothing comes out.</p>	<p>20. P3 stated that sometimes, after getting up from a sitting position, she will experience an unintended release of urine for a few minutes. P3 implied that after leaking urine, she anticipates needing to use the toilet to urinate further, and so sometimes, she attends the bathroom. P3 stated that, after being incontinent, sometimes she urinates in the toilet but at other times, there is no urine released. P3 stated that she becomes frustrated when she goes to the toilet anticipating a need to urinate and discovers that there isn't any urine coming out.</p>	<p>20. P3 stated that sometimes after she stands up (from a seated position), urine will immediately begin flowing out of her body for a few minutes. P3 stated that the incontinence is a signal to her that further urination is necessary, but when she goes to the toilet, she discovers that urine is not always released, which is frustrating for her.</p>	<p>20-21. After experiencing urine leakage at home, P3 goes to the toilet and becomes frustrated when she is unable to release any urine volitionally. She wonders if the reason why she is unable to urinate in these instances is related to her difficulty providing urine samples when her doctor asks her to. At her doctor's office, P3 is aware of several instances in which her bladder is full, but is unable to intentionally release urine when asked to do so. P3 is frustrated by her lack of ability to control when and where she urinates – when she does not intend to release urine, it comes out anyway (incontinence), and when she does intend to release urine, it fails to come out.</p>
<p>21. <b>P3:</b> Now Dr. [NAME1] also said to me, I can not go 'on demand'. If I had to go to the washroom, I can't do that. <b>I.:</b> Uhuh, no, what happens? <b>P3:</b> Nothing. <b>I.:</b> Oh okay, okay. <b>P3:</b> I can't do it because I know, because sometimes, because I went a, once she suggested a little bit, maybe, you know, a few drops and that, and nothing, and my bladder was full, and yet I could not go, 'cause she said</p>	<p>21. P3 stated that she is unable to urinate when asked to do so by her doctor. P3 stated that, when her doctor asked her to urinate any amount, however small, she was unable to release any urine despite having a full bladder. P3 stated that she does not know why she is unable to urinate when asked by her doctor to do so, and whether it may be related to anything in her past history.</p>	<p>21. P3 stated that she has had experiences in which she was asked to urinate by her doctor, but was unable to do so. P3 stated that she has no idea why this took place, because her bladder was full. P3 implied that she genuinely would have liked to provide the urine sample as asked of her. The instances described by P3 imply that she has held back urination, involuntarily, despite having intentions to</p>	<p>21. P3 stated that she has had experiences in which she was asked to urinate by her doctor, but was unable to do so. P3 stated that she has no idea why this took place, because her bladder was full. P3 implied that she genuinely would have liked to provide the urine sample as asked of her. The instances described by P3 imply that she has held back urination, involuntarily, despite having intentions to</p>



<p>to me, 'do you have to go to the washroom?' I can't do it on demand for some reason, whether it has to do with way back, going way back. I have no idea. <b>I.:</b> Okay, It's just not agreeing with you. <b>P3:</b> Nothing agrees with me as far as that's concerned. Nothing, honestly. <b>I.:</b> Doctor asks and you say, well I'll have to catch you later. [laughs]. <b>P3:</b> [laughs] Yeah.</p>	<p>In response to I.'s assertion that P3's bladder does not comply with what she asks it to do, P3 replied that she encounters numerous difficulties in relation to her urinary problems, which are very frustrating for her.</p>	<p>produce urine for the authority figure who asked her to do so (?“shy bladder”).</p>	
<p>22. <b>P3:</b> ... and apparently I do have quite a few bladder infections, but I don't feel anything, <b>I.:</b> Okay. <b>P3:</b> like passing urine or I mean, I think, I know that it's not sore, it's not nothing, <b>I.:</b> Um-hmm. <b>P3:</b> but I know I went once and she was, 'you've got a bladder infection'. Oh. I mean I didn't feel anything, nothing.</p>	<p>22. P3 stated that she has had numerous urinary tract infections in the past, but has not felt any soreness when passing urine at those times. P3 implied that she was surprised to learn from her doctor that she had a bladder infection, because she did not feel any of the typical symptoms, such as soreness or discomfort while passing urine.</p>	<p>22. P3 stated that, in the past, she has had numerous bladder infections, but has not felt any soreness while passing urine, or other symptoms. On at least one occasion, P3 was surprised to learn about the presence of a bladder infection from her doctor, because she was not aware of any symptoms at that time.</p>	<p>22-25*. P3 stated that she has had numerous bladder infections where she did not experience any symptoms. Rather, P3 learned about the infections only through her doctor, who had conducted tests that identified the presence of the bacteria in the urine. P3 received treatment for these infections, and affirmed that the urinary urgency she experienced did not change in quality during this treatment.</p>
<p>23. <b>I.:</b> Okay. And did you get some treatment for the infection? <b>P3:</b> Yes, I got treatment for the infection.</p>	<p>23. In response to I.'s query, P3 stated that she received treatment for the infection.</p>	<p>23-25. In response to I.'s queries, P3 affirmed that the urinary urgency she experienced did not change in quality during the treatment she received for the bladder infection. P3 agreed with I.'s assertion that the bladder infection was 'silent' - referring to its manifestation in her body without any of the expected symptoms.</p>	
<p>24. <b>I.:</b> Yeah. And even with the treatment did you notice any change in the urgency at all? No eh? Hm. <b>P3:</b> Nothing.</p>	<p>24. In response to I.'s query, P3 stated that she did not experience any change in urinary urgency with the treatment.</p>		
<p>25. <b>I.:</b> A silent infection. <b>P3:</b> Yeah, yeah. Silent. <b>I.:</b> A silent infection, yeah.</p>	<p>25. I. stated to P3 that the urinary tract infection was 'silent' in the sense that an infection was present without typical symptoms. P3 affirmed.</p>		
<p>26. <b>I.:</b> Hmm. I'm wondering [WL-02-09], if you could take me back in time to an experience where, and we talked about this on the phone, a particular experience that you wanted to share with me that you had urgency and</p>	<p>26. In response to I.'s request to hear more about a past experience of urinary urgency and incontinence, P3 stated that she has had instances of unintended urine release as she gets up from a seated position. After P3</p>	<p>26. In response to I.'s query, P3 stated that she has had unexpected instances of urine release (incontinence) as she rose to a standing position from being seated. In these instances of incontinence, which lasted a few seconds,</p>	<p>26-27. P3's experiences of urgency and incontinence occur when she rises from a standing position after being seated ("stand up urgency"). After getting up, P3 becomes aware of</p>

<p>incontinence and we'll just talk about that for a little bit. <b>P3:</b> The only thing I can say in regards to that is when I'm sitting and watching television, or just sitting or whatever doing something, whatever, and I get up and I flow, like maybe, just a second or two seconds. And so I think, well I have to go to the washroom,</p>	<p>experiences the flow, which lasts a few seconds, she seeks out a toilet.</p>	<p>P3 believed that she had to urinate further and sought out a toilet.</p>	<p>a flow of urine from her body, which begins without any intention on her part. For P3, the "urgency" refers to her striving to reach the toilet as fast as possible because the process of urination, albeit unintentional, has already begun. P3 wears a pad all the time now because she anticipates that she will leak in these situations. P3's recall of a past time when she did not wear pads draws attention to the progressive worsening of these symptoms over time.</p>
<p>27. but as I say, I always wear a pad so you know that, I never used to, but I do now because of that reason</p>	<p>27. P3 stated that she now wears a pad to capture the urine released unintentionally as she moves from a seated to an upright position. P3 recalled that she did not wear a pad in the past, and implied that she did not have any leakage of urine at that time.</p>	<p>27. P3 stated that, at present, she always wears a pad to capture the urine that leaks out (is released unexpectedly). P3's recall of a time when she did not suffer any leakage or wear pads draws attention to the worsening of her urinary problems over time.</p>	<p>27. P3 stated that, at present, she always wears a pad to capture the urine that leaks out (is released unexpectedly). P3's recall of a time when she did not suffer any leakage or wear pads draws attention to the worsening of her urinary problems over time.</p>
<p>28. and then I go to the washroom and nothing happens. <b>I.:</b> Nothing happens. <b>P3:</b> Nothing happens. And then maybe half an hour later, then I have to go, then I go. But right then, when the flow, nothing happens.</p>	<p>28. P3 stated that when she goes to use the toilet immediately after leaking urine, she is surprised to find that there isn't any urine released. P3 stated that, about a half hour later, she will feel a need to urinate, and is able to release urine at that time.</p>	<p>28-31. P3 stated that, in those instances after being incontinent, she immediately seeks out a toilet because she expects that there is urine remaining in her bladder. However, more often than not, P3 stated that she is unable to void, which is frustrating to her. P3 stated that, a short time later (15-30 mins), she will develop a need to urinate, which motivates her to attempt voiding and typically results in the release of urine. P3 implied that she is perplexed about her initial inability to void when she is able to void just a short time later, and annoyed that more than one visit to the bathroom is needed to satisfy (or relieve) her need to urinate. For P3, these occurrences may be another instance in which she believes herself to be "holding back" urine that she otherwise wishes to release.</p>	<p>28-31. After experiencing this instance of unintentional urine loss, P3 presumes that there is additional urine in her bladder and attempts to urinate in the toilet. She becomes frustrated when urine is not released, contrary to her expectations. P3 is frustrated and perplexed when, just a short time later, she will feel the need to urinate and be able to release urine then. P3 is annoyed that more than one visit to the bathroom is needed to satisfy (or relieve) her need to urinate. For P3, these occurrences may be another instance in which she is frustrated by her lack of release of urine when she intends to so – interrupting her sense of control about when and where she urinates.</p>
<p>29. And that's very frustrating too because you think you've done a little bit so, you know, I mean, there must be some more. <b>I.:</b> You would expect, you expected some more. <b>P3:</b> Yes, some more, but nothing happens. <b>I.:</b> And nothing happens when you get to the washroom? <b>P3:</b> No, the majority of the time nothing happens. And it's most frustrating that part.</p>	<p>29. P3 stated that she anticipates the presence of additional urine in her bladder after the occurrence of unintentional leakage, and so she goes to use the toilet to release it. P3 stated that, more often than not, she is unable to release any urine into the toilet, and feels frustrated when she learns that the urine she expected to be in her bladder was not there.</p>	<p>28-31. P3 stated that, in those instances after being incontinent, she immediately seeks out a toilet because she expects that there is urine remaining in her bladder. However, more often than not, P3 stated that she is unable to void, which is frustrating to her. P3 stated that, a short time later (15-30 mins), she will develop a need to urinate, which motivates her to attempt voiding and typically results in the release of urine. P3 implied that she is perplexed about her initial inability to void when she is able to void just a short time later, and annoyed that more than one visit to the bathroom is needed to satisfy (or relieve) her need to urinate. For P3, these occurrences may be another instance in which she believes herself to be "holding back" urine that she otherwise wishes to release.</p>	<p>28-31. After experiencing this instance of unintentional urine loss, P3 presumes that there is additional urine in her bladder and attempts to urinate in the toilet. She becomes frustrated when urine is not released, contrary to her expectations. P3 is frustrated and perplexed when, just a short time later, she will feel the need to urinate and be able to release urine then. P3 is annoyed that more than one visit to the bathroom is needed to satisfy (or relieve) her need to urinate. For P3, these occurrences may be another instance in which she is frustrated by her lack of release of urine when she intends to so – interrupting her sense of control about when and where she urinates.</p>
<p>30. <b>I.:</b> Uhuh, uhuh, and can you, what aspect of it is frustrating, 'cause you expect something to be there? <b>P3:</b></p>	<p>30. In response to I.'s query, P3 affirmed having feelings of frustration when she expected urine to be present</p>	<p>30. In response to I.'s query, P3 affirmed having feelings of frustration when she expected urine to be present</p>	<p>30. In response to I.'s query, P3 affirmed having feelings of frustration when she expected urine to be present</p>

<p>Yes, yes. And then the thing is like maybe fifteen minutes later I have to go again, and then I go. So why couldn't I go at that time when...? That's what's frustrating, the time limit, the time frame I guess.</p>	<p>in her bladder and then discovered it was not. P3 added that she is frustrated when she feels a need to urinate and is then able to successfully release urine in the toilet only a short time after a previous unsuccessful attempt to do so.</p>		
<p>31. <b>I.:</b> And is it frustrating the fact that you've had to make sort of two trips or more? <b>P3:</b> Yes. <b>I.:</b> Kind of...</p>	<p>31. In response to I.'s query, P3 affirmed that she is frustrated by having to make multiple trips to the bathroom in order to urinate. P3 implied that she remains unsatisfied about relieving her need to urinate after the first unsuccessful attempt to use the toilet after leaking. For P3, she requires an additional trip to the bathroom to attain a feeling of relief or satisfaction of the need to urinate.</p>		
<p>32. <b>P3:</b> And the thing is like, especially in the wintertime, you know, you're doing... <b>I.:</b> Take all your clothes off... <b>P3:</b> And I wear, clothes off, clothes off, it's frustrating to no end. <b>I.:</b> [laughs] Yeah. <b>P3:</b> So I know, under here... a friend of mine, she's a little Chinese girl, she's pregnant now and they were over, she brought her mother here, 'cause she's pregnant so, anyway so her mother and her wear these... <b>I.:</b> Oh, like long johns! <b>P3:</b> Long john's, like long john's and I never do. I never did, but she does and so does her mother. Her mother doesn't speak English at all, so anyway she speaks better English so she said 'Why don't you get something? Like it's too cold, you have to keep your legs warm'. Oh, so I said 'okay. So I said I'll go and see if I can get some, I don't know where, but I'll...' So anyway they, I</p>	<p>32. P3 stated that she is frustrated about the time and effort needed to take off her clothes so that she can use the toilet to urinate, especially in the winter when she wears additional layers of clothing to keep warm.</p>	<p>32. P3 is annoyed by the multiple trips to the bathroom required to satisfy her need to urinate, because of the time and effort it takes her to remove clothing, especially in the winter, when she wears additional undergarments.</p>	

<p>live up in [CITY1] across from [NAME OF MALL] and so she went there and she phoned me back and I was... And she says, 'are you home?' I said, 'yes'. 'Can we come over?' I said, 'you were just over', I said 'sure'. So she bought me two pair. <b>I.:</b> Oh! <b>P3:</b> And so I've been wearing them and so, as you say, take this off, I take that off and my girdle and the pad, and like it's, it's most frustrating you know to have to do all this.</p>			
<p>33. And then sometimes at night when I have to get up, I get up more often, maybe because I don't go during the day as often, maybe I should, the doctor suggested I do, I sit on the toilet, but I can't sit on the toilet every two hours at least.</p>	<p>33. P3 stated that, on some nights, she has to get up to urinate numerous times. P3 stated that her frequent urination at night may be related to the small number of times she attempts to urinate during the day. P3 stated that she should consider going to urinate more often during the day as her doctor recommended, which would increase her frequency of urination. P3 implied that she would be irritated by sitting on the toilet to urinate every two hours or so, and is unlikely to do so.</p>	<p>33-34. P3 stated that, on some nights, she has to get up to urinate numerous times, and she will occasionally experience "urgency", both of which are bothersome for her. P3 stated that her doctor suggested urinating more frequently during the day as a means to reduce the frequency of nighttime urination. She implied that doing so would be so irritating that she is unlikely to carry out the doctor's recommendation.</p>	
<p>34. When I go at nighttime, sometimes, again it's very, the urgency is there, sometimes, not always, but sometimes. So, you know, it's not good. It's not good.</p>	<p>34. P3 stated that, sometimes, she will have urgency when she needs to urinate at night, and it is bothersome for her.</p>		
<p>35a. <b>I.:</b> And what happens during the night? <b>P3:</b> It wakes me up. <b>I.:</b> It wakes you up. <b>P3:</b> Yep, and then I think, 'why am I awake?' And then I go, 'oh I have to go the washroom'.</p>	<p>35a. In response to I.'s query for further information about what happens at night, P3 stated that the need to urinate awakens her from sleep. P3 stated that, once she is awake, she becomes aware that she needs to urinate.</p>	<p>35a-35b. P3 experiences significant sleep disruption due to her urinary problems. P3 stated that, on a typical night, she gets only three hours of uninterrupted sleep; otherwise, she is woken from sleep by the need to urinate every hour or so. P3 implied that the lack of restorative sleep leaves her feeling</p>	<p>35a-37. P3 experiences unpleasant secondary health effects related to her urinary symptoms that are disruptive to her patterns of everyday life. Her sleep is disturbed by a frequent need to urinate, and she is cautious not to drink fluids that could</p>
<p>35b. And as I say, sometimes the urgency, the most I've</p>	<p>35b. P3 stated that the urgency to urinate disrupts</p>		

<p>slept is three hours, and it seems like from three to six, those, that, those hours I seem to be able to sleep. I sleep three hours before that, like I go to bed around 11:30 maybe 12, and I go to the washroom before I go to bed, and at one o'clock I get up and I go, maybe two o'clock again, and then maybe not two, but maybe three then I go, then I'll sleep until six. <b>I:</b> Uhuh. <b>P3:</b> And then after that, you know it's seven o'clock, eight o'clock and almost every hour on the hour. <b>I:</b> Almost every hour.</p>	<p>her sleep. P3 stated that she gets about 3 hours of uninterrupted sleep in the early morning between 3 am and 6 am. P3 stated that for the first three hours after she first retires to bed, her sleep will be disrupted every hour or so by the need to get up from bed to urinate. P3 added that she will continue to urinate almost every hour on the hour for the first few hours in the morning, after rising from sleep.</p>	<p>fatigued and exhausted, thus impacting the quality of her experiences during waking hours.</p>	<p>exacerbate the problem, despite a dry mouth and throat for which she seeks relief. P3 instead uses a humidifier to ease the dryness, and relies on the assistance of a family member to set it up. Despite P3's restrictions on the volume of fluid she drinks, she has not observed any changes in the frequency of urination, which is very frustrating for her.</p>
<p>36. <b>P3:</b> And I find that I, my throat and my mouth gets very dry. And I have to get my son to put the dehumidifier on in the house. So I have to have something to drink, so I, sometimes I don't drink I just wash my mouth out with water or something like this.</p>	<p>36. P3 stated that her mouth and throat becomes very dry at night. She stated that she will use a dehumidifier in the house to put moisture into the air, and she will also have something to drink to ease the sense of dryness. P3 expressed reluctance to drink water, however, and will often only rinse her mouth out with water, so that she will have less need to get up to use the toilet.</p>	<p>36. P3 also experiences mouth and throat dryness, which have been difficult to alleviate given her urinary problems. In part, P3 eases the dryness by humidifying the air, which requires her to ask for assistance from a family member to operate the machine. For P3, her desire to drink is more difficult to manage – she wants to drink, but sometimes won't do so due to concern that drinking fluids will bring about more frequent urges to urinate and greater sleep disruption.</p>	
<p>37. And it doesn't seem to matter what, I don't drink, sometimes I do drink a lot, or maybe two or three gulps you know, and sometimes I just wash my mouth out and this and that, I still get up. <b>I:</b> You still have to get up? <b>P3:</b> I still have to get up, it doesn't matter, so. <b>I:</b> So changing your fluid intake you haven't found any really... <b>P3:</b> No, no. <b>I:</b> You know, any impact on how many times you have to go? That sounds frustrating also. <b>P3:</b> That is, it's yeah, I never thought that something like this would be so</p>	<p>37. P3 stated that she has to get up from bed to use the toilet to urinate during the night regardless of the amount of fluid she has had to drink. In response to I's query, P3 affirmed that changing her intake of fluids has had little impact on her need to urinate during the night, and she is very frustrated by the disruption to her sleep. P3 implied that she feels powerless in terms of her ability to reduce her need to urinate at night.</p>		

frustrating, but it is,			
38. and especially now that I have to stand up, that's really bad. Because now I have sciatica in this one leg, and I'm going to the chiropractor, she's trying to do something, but sometimes it's very hard for me and again, the washroom was right there at night, it's not that far to go, but sometimes the leg hurts so badly that I can barely, that I can barely walk, so to get to the washroom even the few steps I have to take...it's hard. It's hard. But hopefully this will go away, the sciatica will go away,	38. P3 stated that it has become very difficult for her to urinate because of her other health problems. P3 stated that she has sciatica in one leg, and implied that the condition makes it painful for her to stand while urinating. P3 also stated that the pain in her legs makes it difficult and painful for her to walk to the toilet, even though it is only a short distance away. P3 added that she has been seeing a chiropractor to treat the leg problem, and remains hopeful that the problem will go away.	38-39. P3 stated that her process of urinating from a standing position, as well as traveling to and from the toilet, have been very difficult because of the pain she experiences (due to sciatica). P3 is hopeful that the treatment she has undertaken for her leg will be successful, but is mindful that the urinary problems will continue to plague her even if the pain abates.	38-39. P3's current experience with a painful back/leg condition further complicates her already-difficult process of urinating from a standing position. P3 is hopeful that the painful condition can be treated, but remains aware that even if the pain subsides, her urinary symptoms will continue to disrupt her patterns of everyday life.
39. but I still have to go, whether I have anything wrong with me or not, or, the urgency at night especially is...	39. P3 stated that, irrespective of her ongoing health problems, she still needs to be able to use the toilet, which is a problem for her, especially with the urgency to urinate she experiences at night.		
40. <b>I.:</b> So your urgency is different in the day vs. the night? <b>P3:</b> Yes, yes.	40. In response to I.'s question about whether her urinary urgency was different in the day compared to the night, P3 affirmed that this was the case.	40. P3 affirmed that her experiences of urinary urgency are different in the day compared to the night.	
41. <b>I.:</b> How is it different? <b>P3:</b> I guess, during the day when I stand up sometimes I urinate, you know like, but at nighttime, it seems not all the time, that maybe once and a while I'll leak. Maybe if I, if it doesn't wake me up in time, that I really, and the urgency is there, but most of the time it's not.	41. In response to I.'s question about how the urgency is different, P3 stated that in the day she will sometimes leak urine when she stands up from a seated position, but she leaks urine less often at night. P3 stated that she will leak urine at night, if she has not been awoken from sleep with sufficient time to get to the toilet, and if the urgency is present. P3 implied that generally she leaks urine more often during the day relative to the night.	41-42. P3 stated that she will experience urine leakage at night when "urgency" (?intense need to urinate) is present and if she doesn't have sufficient time to reach the toilet after being roused from sleep. In contrast, urine leakage in the daytime occurs after rising from a seated position. P3 implied that typically urgency is not present each time she gets up at night to urinate, and so she leaks urine less often at night, but the variability in its frequency across consecutive nights makes it difficult for her to state with certainty.	41-42. P3 stated that she will experience urine leakage at night when "urgency" is present because the urine begins to flow out of her body (incontinence) as she is <i>enroute</i> to the toilet and she is unable to reach the toilet before the urine leaks out. P3 noted that urgency is not present each time she gets up at night to urinate, and so she leaks urine less often at night compared to the daytime, where it occurs after rising from a seated position. However, P3
42. But then a couple of nights	42. P3 clarified that she has		

<p>ago almost every time I got up, the urgency was there and yet last night, it wasn't so, you can never tell when its there or not.</p>	<p>experienced nights in which she had urgency each time she got up to urinate, and other nights in which she has not had any urgency. P3 implied that, at night, she is unable to predict whether urgency will be present when she gets up to urinate.</p>		<p>stated that the variability in the frequency of urgency across consecutive nights makes it difficult for her to know with certainty. For P3, the nighttime involves an array of awakenings from sleep, some of which involve urgency and/or leakage, which she cannot control and feels helpless to change.</p>
<p>43. <b>I.:</b> And so when you wake up and you don't have the urgency, do you still go to the toilet? <b>P3:</b> I still go. <b>I.:</b> You still go. <b>P3:</b> Oh yes, I think, oh yes, 'why am I up?' And then I, so that must mean that I have to go the washroom, so that's why I go anyway. <b>I.:</b> You go anyway, yeah.</p>	<p>43. In response to I.'s query, P3 affirmed that when she is woken from sleep, she sometimes does not feel the urgency to urinate, but she will still go to the toilet. P3 stated that she anticipates that she has been woken up because she needs to urinate.</p>	<p>43-44. P3 stated that, on some nights, she is roused from sleep but does not immediately sense the need to urinate. P3 stated that, in some of these instances, the sense of urgency will appear and she will go to the toilet to urinate, whereas at other times, she infers that she needs to urinate because her sleep has been interrupted.</p>	
<p>44. <b>P3:</b> Sometimes I kind of lay around, like 'why am I up?' You know. And then the urgency is there, so then I have to go.</p>	<p>44. P3 stated that at other times when she is awoken from sleep, she recognizes that there is no immediate need to go to the toilet, but then the urgency will appear and she will go to the toilet to urinate.</p>		
<p>45. <b>I.:</b> And what's it been like for you to be out in social situations? <b>P3:</b> Well because I have the pad, so, most of the time if I go shopping or anything there's washrooms, I know where the washrooms are in all places, so I have to be sure. But other times, because as I say, I wear the pads so if I leak or anything, it's no problem.</p>	<p>45. In response to I.'s query, P3 stated that most of the time when she goes out shopping or to other places, she has taken steps to know where the washrooms are located. P3 implied that knowing where bathrooms are located gives her a sense of certainty about reaching the toilet if she has the urgency to urinate. P3 stated that at other times, when she is not sure about where the bathrooms are located, she is not concerned about urine leakage occurring because she wears a pad to capture and contain it. P3 implied that wearing the pad provides</p>	<p>45. P3 stated that, when outside of the home, she cultivates a sense of certainty about being able to reach a toilet quickly if she has an immediate need to urinate (urgency). P3 stated that when she goes out, she makes sure that she knows where the washrooms are located, and she is re-assured by wearing a pad that can capture and contain any unexpected leaks.</p>	<p>45-47. When P3 goes out shopping or in public places, her actions seek to prevent the embarrassment of being detected as "incontinent" by others. First, she learns where the toilets are so that she can rush to use them when urgency happens, and preferably before urine leaks out. In instances when she does not reach the toilet quickly enough and leakage does occur, she wears a pad to contain the leak, and wears dark clothes to ensure that any seepage</p>

	some reassurance to her, that if urine leaks out, it will not get onto her clothing or other places where it would be visible to others.		onto her clothes is concealed. Since P3's urgency refers to her perception of an unintentional flow of urine that she knows she cannot control, her three activities represent a continuum of concealment protecting her identity as a "continent" woman.
46. <b>I.:</b> Has there ever been a time when the pad hasn't contained all of the urine? <b>P3:</b> Yes.	46. In response to I.'s query, P3 affirmed that there have been times when the pad has not contained all of the urine that leaked out.	46-47. P3 affirmed that there have been a few instances when she leaked urine that went through the pad and onto her clothes. P3 acknowledged that she wears black clothing "below the waist" all the time due to fear that she will leak urine onto her clothing that will be seen by others. P3 implied that the black color disguises any wet spots on her clothing and thus protects her from the embarrassment of being seen by others when incontinence occurs.	
47. <b>I.:</b> Can you tell me about that experience? <b>P3:</b> A couple of times, only because the washroom wasn't close enough or something like this, that I leaked right through the pad and everything. <b>I.:</b> And on to your clothing? <b>P3:</b> Clothing yeah, and this is why I wear black all the time because I'm always afraid, because black won't show and black, you know black skirt or black pants or black something. But not that often, that it's happened, but maybe since the operation, since May, maybe twice, three times at the most that it's happened.	47. In response to I.'s query, P3 stated that, on a few occasions, she leaked urine through the pad and onto her clothing when she was unable to get to a bathroom. P3 stated that she usually wears black clothing "below the waist", such as pants or a skirt, because the wetness or stain from urine won't be visible to others on this color of fabric. P3 implied that she is able to disguise or mask any urine leakage not contained by the pad so that, if it occurs, it will not be visible to other people. P3 clarified that she has rarely leaked urine that the pad could not contain, and estimated that it has occurred maybe two or three times since she had her operation six months earlier.		
48. <b>I.:</b> Do you remember in particular where you were at one time when it happened? <b>P3:</b> Yes, I remember I was in the casino [laughs]. <b>I.:</b> A casino? <b>P3:</b> Yes. <b>I.:</b> Like Casino [NAME2]? <b>P3:</b> Yes. But this was [NAME3], 'cause that's closer. <b>I.:</b> Oh [NAME3]. <b>P3:</b> [NAME3], that's where I was and I don't know why, all of a sudden by the time I get to the washroom, it's not that big, but by the time I got there, it was late. So that's, and the other time... <b>I.:</b> So there was	48. In response to I.'s query about a time when P3 had leaked urine that could not be contained by the pad, P3 recalled one occasion when she was at a casino. P3 stated that she began to urinate while at one of the machines, which was at first contained by the pad she was wearing. P3 stated that by the time she had finished what she was doing at the machine and went to the washroom, urine had begun to seep outside of the pad and onto her clothing. P3 implied that she was	48. P3 recalled one occasion in which she was at a casino and began urinating while playing at one of the machines. Initially the pad she was wearing captured the urine flow, but by the time she arrived at the washroom, the pad had overflowed and her clothing became wet. P3 implied that she was surprised at how quickly the pad became soiled, presumably because it typically contains the urine that leaks out while she is <i>enroute</i> to the toilet.	48. On one occasion, P3 was visiting a casino when she began urinating (unintentionally) while playing at one of the machines. P3 rushed to pack up her things and get to the toilet, however, by the time she reached it, the pad had become saturated with urine and her clothing was wet. P3, who was surprised by the amount of the leak, and the failure of the pad to



<p>that much urine? <b>P3:</b> Yeah. <b>I.:</b> Okay. <b>P3:</b> Yes, yes, there was that much. <b>I.:</b> And it just started when you were at one of the...? <b>P3:</b> Yeah, one of the machines and by the time I got everything done and got to the washroom, it was late.</p>	<p>surprised at how quickly the pad had become soiled with urine, given that it usually holds the urine leakage as she attempts to reach the toilet.</p>		<p>contain all of it, implied that these instances occur rarely for her.</p>
<p>49. I'm trying to think of the other time when the same thing happened. And I think I was, you see when I'm sitting down it's not bad. <b>I.:</b> The urgency? <b>P3:</b> The urgency is not there. <b>I.:</b> Uhuh. <b>P3:</b> But when I stand up, that's the worst part. The urgency's there.</p>	<p>49. P3 stated that she does not feel urgency when she is in a seated position, but when she stands up from a seated position, she does feel urgency, which is very unpleasant to her.</p>	<p>49. P3 clarified that she feels urgency when stands up from a seated position, which is very unpleasant for her, but not while she is seated.</p>	
<p>50. Sometimes I have, like in the car, if I'm in the car and I, and ah, wherever I am and I get up, out of the car and the urgency's there, I go a little bit, you know, a little bit, and then I, wherever I am, I go to the washroom and sometimes I can't, so this is why I have to wear the pad all the time because I'm never sure of what's going to happen. <b>I.:</b> Yeah, I understand.</p>	<p>50. P3 stated sometimes, if she is seated like in a car or elsewhere, when she gets up and out of the position, she feels the urgency and will release a little bit of urine. P3 added that, wherever she is, she will try to get to a washroom after this happens, but sometimes she does not have a washroom available to her. P3 stated that she wears a pad all the time, because she is never able to be certain about whether this will happen to her. P3 implied that wearing the pad provides some reassurance that it will capture any urine that may come out unexpectedly.</p>	<p>50. P3 stated that she feels urgency while rising from a seated position as she gets out of her car, and leaks a bit of urine. P3 stated that, after such instances, she will typically seek out a toilet to urinate, but she is not certain whether one will be available to her. P3 implied that when she is able to fully empty her bladder in a toilet, she feels reassured in averting further leakage, but when one is unavailable, she remains concerned about whether further leakage will occur and relies on the pad to contain it.</p>	<p>50. P3 stated that she feels urgency while rising from a seated position as she gets out of her car, and leaks a bit of urine. P3 seeks out a toilet to urinate, but one is not always available to her. When a toilet is available, she feels reassured when she is able to fully empty her bladder and thus, avoid future leaks. When a toilet is not available, she lives with the uncertainty that future leakage might occur. P3 wears the pad to manage her uncertainty about whether any urine will leak out.</p>
<p>51. And so when you were in the casino that time and the pad was sort of slowly overflowing by the time that you got to the restroom? <b>P3:</b> Yes. <b>I.:</b> And then what happened after that, after, you sort of cleaned up, I guess? <b>P3:</b> Cleaned up, and the pad I had to throw away because it was full, so I just put paper</p>	<p>51. In response to I.'s question about what happened at the casino, P3 affirmed that the pad she wore was full of urine by the time she arrived at the restroom. P3 stated that she threw away the pad, and placed some paper in the crotch of her underwear. P3 implied that she used the</p>	<p>51-52. P3 affirmed that the pad was full of urine when she arrived at the restroom in the casino. P3 stated that she threw away the pad, and because she did not have another pad, she placed paper in the crotch of her underwear. P3, whose clothes were soaked with urine, stated that leaving the casino</p>	<p>51-52. Given the extent of wetness on P3's clothes, the only option was to leave the casino. P3 threw out the pad, which was completely saturated with urine, and did not have a replacement. She placed some paper in the crotch of her underwear as a</p>

	paper as a “stop-gap” measure, as it would provide some security about other leaks that may occur on the way home, and she did not have any additional pads with her.	seemed to be the only option for her. P3 implied that she continued to be concerned about protecting herself against further leakage as she traveled back home.	temporary pad until she arrived home.
52. and then I went home. <b>I.:</b> So you left. <b>P3:</b> So I left, because what else can you do? There’s nothing that you can do.	52. P3 stated that she left the casino after the episode of urine leakage, and implied having a sense of hopelessness about doing so. P3, whose clothes were soaked with urine, stated that leaving seemed to be the only option for her.		
53. <b>I.:</b> Do you tend to carry pads with you? <b>P3:</b> Yes, sometimes I do, depends on where I’m going, yeah, I would carry an extra pad. But that hasn’t happened that often because, number one I’m not, I don’t go out that far away from the washroom at the mall or shopping or this, the washrooms are right there so I can always go. <b>I.:</b> Yeah.	53. In response to I.’s query, P3 stated that she sometimes carries extra pads with her, depending upon where she is going. P3 clarified that she often does not carry additional pads because when she goes out to the mall or shopping, she stays close to where washrooms are located so that the facilities are in close proximity when she needs to use them.	53-54. P3 clarified that she sometimes carries extra pads with her depending upon where she is going, but she has not felt compelled to do so because of the few instances in which such a large volume of leakage came out and seeped through the pad (1-3 times). P3 implied that she prefers to stay close to washrooms when she goes out in her local area, rather than relying on pads to catch the urine leakage.	53-54. P3 only occasionally carries extra pads with her, depending on where she is going, because she does not believe that she will encounter large leaks. P3 limits her activities to places where she knows where the washrooms are so that she can respond to the feeling of urgency by toileting promptly. P3 implied that she is willing to restrict her freedom of activity so that she can be confident about using the toilet when urgency appears, rather than to venture out into novel area, which would require reliance on pads.
54. <b>P3:</b> So this hasn’t happened that often, maybe as I say, maybe two times, maybe three times at the most, but I think even twice, I think, its only happened really that it was so bad that so...	54. P3 implied that she has rarely left situations in which she experienced such a large volume of urine leakage where the pad became flooded and her clothes were soiled. P3 estimated that these situations have only occurred two or three times in the past.		
55. whether I left, whether I could go right away when I wanted to, when I had to, or what it is I have no idea, I don’t remember, but it was... <b>I.:</b> And it just happened. <b>P3:</b> It just happened. <b>I.:</b> It just happened. <b>P3:</b> Thanks goodness, not too often, but it happens, but...	55. P3 stated that this episode of urine leakage came on very suddenly and unexpectedly. She expressed relief that she does not encounter these situations very often.	55. P3 stated that the episode of urine leakage in the casino came on very suddenly and unexpectedly, and she is relieved that she does not encounter these situations very often.	
56. <b>I.:</b> Well that, it sounds as if, ... ‘cause those, actually	56. In response to I.’s query, P3 affirmed that she wears	56. In response to I.’s query, P3 affirmed that she wears	

<p>what kind of pad do you wear? <b>P3:</b> A Tena. <b>I.:</b> A Tena? <b>P3:</b> Yeah.</p>	<p>TENA pads.</p>	<p>TENA pads.</p>	
<p>57. <b>I.:</b> It sounds like there was a large volume in your bladder that just started to... <b>P3:</b> Yes, yes, it just started. <b>I.:</b> To come out. <b>P3:</b> That's right, that's right, and there's no... once it starts, there's really no stopping until, you know, after a while it will stop by itself or I'll, but,</p>	<p>57. In response to I.'s query, P3 stated that the flow of urine occurred unexpectedly. P3 added that when the urine began to flow, there is nothing she can do to stop it. P3 implied that the urine flow stops only after her bladder has become completely empty.</p>	<p>57. P3 clarified that once the urine flow (leakage) started in the casino, she felt powerless to do anything to stop it. P3 implied that the urine leakage stops only after her bladder is fully empty.</p>	
<p>58. and there's sometimes when I go at night, not so much during the day, but at nighttime, you know I'll go to the washroom for a long time and then maybe at the end I'll push down and that, and a little bit dribbles and a little bit more and then there's nothing. There's nothing. <b>I.:</b> Uhuh, uhuh, so you would want to sort of check that it's empty. <b>P3:</b> Yes, definitely because I don't want to get up again.</p>	<p>58. P3 stated that sometimes, before retiring to bed, she will go to the toilet to urinate and after urination, she will physically push down on her lower abdomen/pubic area with her hands. P3 stated that she wants to be certain that all the urine has been expelled from her bladder and avoid the need to get up to urinate after retiring to bed.</p>	<p>58-59. P3 stated that after urinating she will physically press on her lower abdomen/pubic area to ensure her bladder is fully evacuated. P3 stated that she has had past experiences in which she has urinated prior to retiring to bed only to perceive another need to urinate and have to get up to void again. P3 stated that she feels stressed when this situation happens, and so she tries to evacuate the bladder physically to avoid this from happening.</p>	<p>58-59. P3 uses physical maneuvers, such as pressing on her lower abdomen/pubic area, to ensure her bladder is fully evacuated. Previously, P3 has retired to bed after voiding, only to immediately perceive another need to urinate that required a second trip to the bathroom, which she finds stressful. P3 uses the maneuver to avoid the second trip to the toilet by ensuring her bladder is empty the first time around.</p>
<p>59. And how many times I have done that, I've gotten in to bed and I think, 'oh no, I've got some more and I get up again' and I go and go some more. <b>I.:</b> You do, you do? <b>P3:</b> Yeah, and I dribble again. So, you know, it's really stressful. <b>I.:</b> Yeah... <b>P3:</b> It's really stressful.</p>	<p>59. P3 stated that on many occasions, she has retired to bed and then realized that she has to get up to return to the toilet to urinate. P3 stated that when she returns to the toilet, she sees that there was additional urine that needed to be released. P3 stated that she feels stressed when this situation occurs.</p>		
<p>60. <b>I.:</b> And the day that you were at the casino how did you leave it? Were you there with friends, I mean? <b>P3:</b> I was there with a friend. <b>I.:</b> Yeah? <b>P3:</b> Yeah. <b>I.:</b> Yeah, uhuh. <b>P3:</b> You know we just left. <b>I.:</b> You both left? <b>P3:</b> We both left. <b>I.:</b> You both left, yeah, yeah, yeah. <b>P3:</b> Yeah, we both left. <b>I.:</b> Did you share what happened to you with her? <b>P3:</b> Yeah, I told her. Oh</p>	<p>60. In response to I.'s query, P3 stated that she was at the casino with a friend, whom she informed about the urine leakage, and they both left the casino together. P3 stated that her friend was aware of her urinary problems because she had told her. P3 implied that her friend understood the need to leave after the urine leakage, given her own experiences with medical</p>	<p>60. P3 stated that she was at the casino with a friend, whom she informed about the urine leakage, and they both left the casino together. P3 stated that her friend was aware of her urinary problems because she had told her. P3 implied that her friend understood the need to leave after the urine leakage, given her own experiences with medical problems.</p>	<p>60. P3 felt supported by her friend, who seemed accepting of need to end the visit to the casino prematurely. P3 had told her friend about the urinary problems she had, and believed her friend's empathic response followed from her own experiences with medical problems.</p>

<p>yeah, she knows, she knows. <b>I.:</b> Yeah. <b>P3:</b> That I have a problem. She has problems, not those ones. [<i>laughs</i>] <b>I.:</b> Not the urine, not the bladder ones [<i>laughs</i>]. <b>P3:</b> No. <b>I.:</b> Other ones.... <b>P3:</b> Other problems, yeah. <b>I.:</b> Yeah, yeah.</p>	<p>problems.</p>		
<p>61. <b>P3:</b> In fact she lives here in [CITY2], this is why, and her birthday was yesterday and you know how the weather was yesterday. <b>I.:</b> Yes. <b>P3:</b> There's no way I was going to go anywhere, so I said I'll take here out today for lunch. <b>I.:</b> Ah! <b>P3:</b> So this is why I'm, this is why it was a good idea to come here and get it right away. <b>I.:</b> Yeah, yeah. <b>P3:</b> So she was, actually she lives on [NAME OF STREET IN CITY2]. <b>I.:</b> Uhuh, not far from here. <b>P3:</b> Not far from here. <b>I.:</b> Yeah, yeah.</p>	<p>61. P3 stated that the friend with whom she traveled to the casino lived close to the location of the office where the interview was conducted, and she planned to have lunch with her after the study interview was completed.</p>	<p>61. P3 stated that she had plans to visit with the friend who was with her on the day of the urinary accident at the casino once the study interview was completed.</p>	
<p>62. <b>P3:</b> But as I say I'm just hoping that Dr. [NAME1] will be able to do something for this (?? inaudible) I have no idea. And I phoned her once for an appointment and there was no answer, actually an answering machine and I'm, she'll probably phone me today and I'm not home naturally. [<i>laughs</i>] <b>I.:</b> [<i>laughs</i>] <b>P3:</b> I called her the other day, and I don't think she works every, I don't know if she's there every day. Her secretary must have gone or something, but she'll probably call me today, and ask, 'where are you?' <b>I.:</b> The day that you're not there to take the call. <b>P3:</b> The one day, that's right. That's right.</p>	<p>62. P3 stated that she remains hopeful that her surgeon will be able to do something that will alleviate her urinary problem. P3 stated that she has been trying to set up an appointment at the clinic to see the doctor.</p>	<p>62. P3 remains hopeful that her surgeon will be able to do something to alleviate her urinary problem and has been trying to set up an appointment at the clinic to discuss it.</p>	
<p>63. <b>I.:</b> I'm just wondering [WL-02-09], the last question is, I'm wondering about what</p>	<p>63. In response to I.'s query about the personal meaning that urinary incontinence and</p>	<p>63-64. For P3, the most significant impact of the urinary urgency and leakage</p>	

<p>meaning this having incontinence and the urgency has held for you personally?  <b>P3:</b> It's very uncomfortable and especially, not during the day, it's not so bad, the pads, I guess this is why I'm not playing it up so much, but at nighttime when I have to get up three or four times at night, that's really, for me, because sometimes I can't fall asleep again,</p>	<p>urgency held for her, P3 acknowledged that she felt very uncomfortable about it. She stated that she did not find urgency and incontinence to be troublesome during the day, as she has been able to manage it by wearing pads. But, for P3, it is more troublesome at night, especially due to the disruption in her sleep. P3 stated that she has to get up three or four times each night due to urinary-related issues, and it is difficult for her to resume sleep afterwards.</p>	<p>is the regular sleep interruption (3 to 4 times/night), which is very uncomfortable for her. P3 stated that she is usually able to resume sleep immediately, but when she cannot, she will try home or pharmaceutical remedies. P3 stated that the urinary symptoms are not as troublesome during the day, and she has been able to manage by wearing pads.</p>	
<p>64. and I have to go and get a drink, and I have to have warm milk and I have to, you know, the doctor gave me some kind of pills that I take if I can't sleep. I can't get back, usually I can get right back to sleep, but not always. Sometimes I don't and it's frustrating, especially at nighttime it seems to me. At nighttime. To get up so. And when you didn't before and then all of a sudden, so yeah that makes it's frustrating. <b>I.:</b> I understand. So that's the end of the interview.  <i>[the tape is stopped]</i></p>	<p>64. P3 stated that when she is unable to resume sleep, she drinks warm milk or takes a sleeping pill to help her. P3 stated that she is usually able to resume sleep immediately, but not all the time and the sleep disruption is very frustrating to her. P3 also stated that her frustration is related to immense and sudden change in her ability to sleep continuously through the night, which she had been able to do until the urinary problems developed.</p>		