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A Scoping Review: General Mental Health Among Post-Secondary Students in Bangladesh

(Title)

by

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Practice-based Research Paper

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Abstract

Globally, post-secondary students can be seen to struggle with their mental health and this is no different for post-secondary students living in Bangladesh which is a lower-middle-income country. Mental health research in Bangladesh is limited and, thus, the purpose of this study is to capture all the existing literature pertaining to the general mental health of post-secondary students in Bangladesh through a scoping review. This study is guided by the scoping review model outlined by Arksey and O'Malley (2005). This study has searched and screened the following 4 online databases: PsycINFO (Proquest), Social Work Abstracts (Ovid), ERIC (OCUL), and Web of Science with yielding the selection of 19 studies. The key findings indicate that prevalent mental health challenges amongst post-secondary students in Bangladesh includes suicide, suicidal behaviours, depression, anxiety, stress, and struggles with overall mental health. Common mental health factors include being a female, financial and economic condition, academic year of study, history of mental health both personal and familial, substance addiction, family, social media and screen time, academic performance, past negative experience, and romantic relationships. In conclusion, this scoping review has found that the general mental health of post-secondary students in Bangladesh is poor and connected to multiple factors.

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Introduction

As the world has progressed, we have all become more open to discussing mental health topics and expanding our knowledge on mental health struggles as well. These conversations and knowledge are important for all of us as mental health is part of our entire lives. It impacts our wellbeing, the way we function, how we live our lives, our relationships, and how we feel. Over the years, mental health literature has grown and it has been able to identify certain populations that are at a higher risk for poor mental health along with determinants. One population includes university students, worldwide, who have experienced a significant rise in serious mental illnesses within the past decade and a half (Storrie et al., 2010). Specific mental health trends seen within this population are a rise in emotional problems, overall poor emotional health in comparison to the general population, students studying medicine reporting higher levels of stress, and that available help can be seen as decreasing (Storrie et al., 2010).

Researcher Interest and Positionality

This understanding of the decline in student's mental health has made me interested in whether there are distinct differences between the mental health of students and its associated factors depending on what area of the world the students live in. Additionally, my positionality has highly influenced this interest and has helped me narrow down the specific research area I would like to study.

I am currently a post-secondary graduate student studying in Ontario, Canada but my ethnic background is Bangladeshi. I immigrated to Canada when I was 4 years old and still have many family members who live in Bangladesh. I have always been interested in mental health research and topics of mental health. Personally, I have particularly found this to be important

for Bangladeshi people and people living in Bangladesh as there is a culture of denying and ignoring prevalent mental health issues due to stigma. Being both Bangladeshi and a post-secondary student myself, witnessing and experiencing the mental health challenges of both, I naturally became interested with the general mental health of post-secondary students living in Bangladesh.

Furthermore, this interest deepened due to recent political events currently unfolding in Bangladesh as I write this paper and when I began my research journey. At the end of June, 2024, a quota was passed in Bangladesh which reserved 30% of government jobs for relatives of war veterans leading to the beginning of student protests in Bangladesh that are still ongoing (Amnesty International, 2024). Though this situation started with the passing of the quota, it has led to other political tensions and violent events (Independent Digital News and Media, 2024). Notably, the political state of Bangladesh does not directly correlate with the research I would like to study but I do believe that it points to the challenges that these students face which would likely impact their mental health.

Moreover, I am also aware that research pertaining to Bangladesh is already very limited and even more so when looking specifically at mental health literature. This piece adds to my interest and passion because I would like to advocate for research in Bangladesh, especially those regarding mental health, to be expanded upon. I believe doing so can assist with uncovering trends, decreasing stigma, eventually normalizing mental health conversations, and facilitating improvement of supports.

Study Objective

Thus, the objective of this study includes exploring available research in regard to the general mental health of post-secondary students living in Bangladesh and identifying prevalent mental health issues as well as determining factors. This study will be conducted through a scoping review which I have deemed to be the most appropriate means of encapsulating the existing mental health research within this specific population of post-secondary students in Bangladesh. The scoping review will aim to answer the following 2 research questions: Firstly, what research exists pertaining to the general mental health of post-secondary students in Bangladesh? Secondly, what do the findings of the research suggest about the overall and general mental health of post-secondary students in Bangladesh?

Before proceeding with the study, I wanted to make an important note and clarify the definition of 'general mental health' within the title of this scoping review and the study itself. This scoping review looks at studies that generally research the mental health of post-secondary students in Bangladesh without predetermining or studying a possible cause or correlation such as a third factor. This means that I have made the decision to exclude studies that focus the research on a specific determinant or external circumstance. This was a planned exclusion both intended to assist with the narrowing down of the research topic and in hopes of increasing the chance of finding a variety of risk factors by avoiding studies that only focus on one determinant.

Overview of Paper

This paper will begin with presenting a literature review looking at general mental health literature that has led to the identification of the under-researched area of mental health among post-secondary students in Bangladesh. The review looks at literature surrounding mental health research in South Asia, mental health research among post-secondary students in South Asia, mental health research in Bangladesh, societal context regarding Bangladesh and mental health,

and how all of this connects to the present study. The paper will then provide details of the study's methodology, method, and research design. Which will include an explanation of the decision to conduct a scoping review, the specific framework and steps followed for the study including a PRISMA Flow Chart, and finally some ethical considerations to be aware of. The findings of the scoping review are then presented. Firstly, through a generical and numerical analysis regarding study characteristics. Secondly, through a thematic analysis consisting of 2 parts with the first highlighting prevalent mental health challenges and the second identifying mental health factors and determinants. After this, I will discuss the findings by summarizing them, reviewing the scholarship, and explaining how this study has addressed the research gap of the identified under-researched area stated within the literature review. This section will also include a brief critical analysis of the findings, my own positionality and subjectivity, social work implications of the study, limitations of the study, and recommendations for future research. The paper will end off with a conclusion that reiterates the knowledge gap, points out important findings, and revisits key implications of the study.

Literature Review

This literature will examine overall mental health literature in South Asia, among post-secondary students in South Asia, and overall in Bangladesh. Notably, the same geographical definition of South Asia that Fernando (2015) utilizes from the United Nations geographical region classification will be applied for this literature review and scoping review. This includes India, Pakistan, Nepal, Sri Lanka, Bangladesh, Bhutan, Maldives, Iran, and Afghanistan.

Mental Health in South Asia

General Overview of Mental Health in South Asia

One of the themes of the available literature includes general mental health as these rates have increased globally with South Asia seeing a significant rise in mental and substance-use disorders exposing a treatment gap (Vidyasagaran et al., 2023). The systematic review of reviews conducted by Vidyasagaran and colleagues (2023) on analyzing mental disorders in South Asia is a broader extension of an umbrella review by Hossain and colleagues (2020). Hossain and colleagues (2020) highlighted the increase of mental disorders, but in contrast to Vidyasagaran and colleagues (2023), there is mention of sociocultural barriers limiting mental health awareness and reporting. Both reviews indicate prevalence of anxiety, depression, mood disorders, and self-harm (Hossain et al., 2020; Vidyasagaran et al., 2023). Other prevalent mental disorders included suicidal behaviour, schizophrenia, substance use disorders, neurodevelopmental disorders, and dementia (Hossain et al., 2020). Vidyasagaran and colleagues (2023) concluded that mental disorders are prevalent in South Asia, but evidence is limited and revolves around common disorders. Hossain and colleagues (2020) point to key themes such as

"maternal depression, psychiatric comorbidities in chronic physical illnesses, and various mental disorders among children, elderly adults, refugees, and other vulnerable populations" (p. 2).

A sub-topic that has emerged from the literature is the prevalence of suicide and suicidal ideation. Arafat and colleagues (2022) emphasized that suicide in South Asia is a major concern and that there are only a "handful of studies" that can be found analyzing depression and suicidal behaviour (p. 181). The data uncovered by Arafat and colleagues (2022) points to a weak link between depression and suicidal behaviour in South Asia which contrasts with high-income countries finding a strong connection. Ullah and colleagues (2021) agree with this by discussing how psychiatric disorders are not considered as suicidal risks within South Asia as they would be within high-income countries. There are other factors within South Asia that lead to suicide and suicidal ideation which need to be addressed through non-clinical interventions as these determinants may involve socio-economic struggles (Arafat et al., 2022; Ullah et al., 2021). Including poverty, gender inequality, and financial insecurity which are connected to healthcare service inaccessibility and higher levels of stress which have amplified during the pandemic (Arafat et al., 2022; Ullah et al., 2021). Research shows that suicide prevention in South Asia must revolve around a community-based framework that is multilayered (Arafat et al., 2022; Ullah et al., 2021). In addition, Jordans and colleagues (2014) found that men commit suicide more than women in South Asia but there are disparities such as in Bangladesh. Although, younger females who are at their reproductive age are either meeting or exceeding male suicide rates in various South Asian countries. This may be why mental health research among women in South Asia, especially those who are pregnant or are mothers, is gaining traction (Hossain et al., 2020; Jordans et al., 2014). Other literature examining suicide focuses on specific populations such as those living with psychosis or bipolar disorder (Khoso et al., 2023).

Looking At Specific Demographic Groups

The literature focuses on women in South Asia as they face unique struggles and mental health challenges (Hossain et al., 2020; Jordans et al., 2014). The research is centered around prenatal maternal, also known as antenatal, mental health (Bright et al., 2018; Insan et al., 2022). Antenatal mental health in South Asia includes additional determinants and contexts in comparison to high-income countries (Arafat et al., 2022; Bright et al., 2018; Ullah et al., 2021). Two commonly agreed determinants include intimate partner violence and anxiety related to baby gender preference as birthing a son is optimal in South Asian culture (Bright et al., 2018; Insan et al., 2022). Other prevalent determinants for prenatal maternal anxiety includes gender inequality, household decision-making, fear of fetal loss, poor family support, and having to work outside of the home due to financial struggles (Bright et al., 2018). Research by Insan and colleagues (2022) found other factors impacting antenatal mental health, mainly anxiety and depression, in South Asia. This includes maternal age, education and literacy, occupation, household income, social and family support, relationship with partner and in-laws, and unplanned pregnancy. There are complex determinants that have been studied in this area and they all often fall into the following three categories including the social milieu, reproductive health factors, and the biological milieu (Insan et al., 2022; Trivedi, 2007).

Other collected demographic information regarding mental health in South Asia include children and adolescents who struggle with their mental health globally but more so in low-income countries due to limited support (Murshid, 2017; Willmot et al., 2023). The prevalent mental health issue that exists among younger people in South Asia include suicidal ideation and depression which are both under-researched (Murshid, 2017; Willmot et al., 2023). The mental health research is even more scarce when looking at older adults in South Asia because of

ineffective measurement tools for collecting data (Banerjee et al., 2022; Fotheringham et al., 2021). This research area has increased in necessity due to the aftermath of COVID-19 since it led to increased psychiatric morbidity, unmet needs, limited healthcare services, and lack of social service utilization among older adults in South Asia (Banerjee et al., 2022).

The Impact of the COVID-19 Pandemic and Other Physical Health Issues

Tanha and colleagues (2022) found that mental health in South Asia declined during the pandemic with increased rates of depression, fear, anxiety, stress, insomnia, and suicidal ideation. These effects can be seen with young people as they have accounted for higher numbers of positive COVID cases (Tanha et al., 2022). Another common focus group with unique struggles includes women experiencing new-onset menstrual cycle disorders and worsened premenstrual syndrome symptoms (Hashmi et al., 2022). Women represent the majority of healthcare workers and research suggests that healthcare workers in South Asia presented with increased depression rates due to the pandemic (Hashmi et al., 2022; Saeed et al., 2021).

Beyond COVID, the literature also examines the connection between mental and physical health. Zavala and colleagues (2023b) note that individuals with a non-communicable disease are more likely to experience mental health issues. In another study, Zavala and colleagues (2023a) concluded that non-communicable diseases served as a risk factor for people in South Asia to develop a severe mental illness. Teo and colleagues (2021) agree with this correlation and found that more than half of selected cancer patients were reporting high anxiety and depression scores.

Interventions

A considerable amount of mental health research in South Asia studies interventions in hopes to improve support. The South Asian Hub for Advocacy, Research and Education was a

funded program created to stimulate mental health research in South Asia so it can be transferred into interventions (Sharma & Razzaque, 2017). Mental health interventions can be improved for children and adolescents although there have been promising efforts through community-based support (Willmot et al., 2023). It is found that, when creating programs for adolescents, there must be an involvement of their family, friends, and loved ones as social support is an essential recovery determinant (Murshid, 2017). Additionally, Singla and colleagues (2014) have found that women in South Asia prefer and benefit the most from receiving maternal mental health services through peer support. On the other hand, there is limited literature regarding older adult's mental health in South Asia as well as effective interventions which is why Banerjee and colleagues (2022) have heavily advocated for this population. This advocacy calls for increased psychiatric training and post pandemic data collection. Finally, other mental health interventions that need to be developed include mobile technology for service delivery and improving psychological interventions to treat depression among individuals diagnosed with non-communicable diseases (Aggarwal, 2012; Zavala, 2023b).

Mental Health Among Post-Secondary Students in South Asia

Due to limited research, this section looks at South Asian countries individually but only reports on those with a sizable amount of research including India, Pakistan, Sri Lanka, and Iran. The South Asian countries that have been excluded have very little or unapplicable research.

India

A significant amount of literature in India focuses on the mental health impacts of COVID-19 as Verma (2020) did by researching the pandemic's effect on college students. Verma (2020) found participants had mild symptoms of depression and anxiety, more prevalent

in females, and shared having sleep struggles. Jain and colleagues (2021) would agree with Verma's (2020) findings regarding mild depression, although they found that most of their college participants did not have anxiety that was directly related to COVID. Outside of COVID impacts, Wasil and colleagues (2022) looked at college students in India in regard to their mental health and improving campuses. These findings pointed to mental health struggles faced by the students including academic pressure, lack of community, party culture and substance abuse, and studying on a geographically isolated campus. Maji and colleagues (2024) would agree that academic stress is one of the greatest factors for student's poor mental health particularly among India's top engineering undergraduates. Just as Maji and colleagues (2024) have done, there are other studies that focus on specific student populations including research conducted by Kar and colleagues (2019) that examine medical students. Their data explores the role of mental health literacy and how strengthening this can lead to improved mental health (Kar et al., 2019).

Pakistan

Less literature surrounds mental health among post-secondary students in Pakistan than in India. A significant portion revolves around general mental health research with some focus on healthcare students. Ghani and Bano (2024) found that students are highly impacted by mental health stigma and gender role stereotypes. Moreover, the data points to the home environment being an essential determinant of mental illness among university students in Lahore which contrasts with the findings of a study done by Saeed and colleagues (2018) also looking at university students in Lahore. Saeed and colleagues (2018) would add that medical and pharmaceutical students presented with increased anxiety; furthermore, male students had higher anxiety levels due to expectations of being self-sufficient. These findings hint at the developing research in Pakistan that focuses on the mental health of healthcare professionals in

terms of examining occupational stressors, job satisfaction, and burnout (Mufarrih et al., 2019). Shoukat and colleagues (2010) studied medical students and agreed with the key research theme that male students received more mistreatment likely due to gendered expectations. Wahid and colleagues (2023) add to this since they have found male medical and dental students in Pakistan to experience increased academic stress. Wahid and colleagues (2023) highlighted that academic performance was correlated with quality of life and academic stress.

Sri Lanka

Post-secondary student mental health literature in Sri Linka is limited with the key contributors being Amarasuriya, Jorm, and Reavley. Some of the compiled findings of these studies include that one tenth of undergraduate students in Sri Lanka struggle with Major Depressive Disorder and female students were more likely to recognize the problem as depression (Amarasuriya et al., 2015a; Amarasuriya et al., 2015c). Moreover, male students struggle with mental health stigma displayed by peers (Amarasuriya et al., 2015b). The general helping intentions of peers is poor although females were found to seek informal help more often; furthermore, the strongest help-seeking predictor is being able to recognize the problem (Amarasuriya et al., 2017; Amarasuriya et al., 2018). Overall, Amarasuriya and colleagues (2015c) promote that post-secondary institutions need to consider the stigma and the factors impacting help-seeking behaviour to support students especially through depression literacy.

Iran

The available literature for mental health among post-secondary students in Iran is the fewest compared to the other four South Asian countries. Mahmoodi and colleagues (2022) found that students would receive mental health information mainly through online sources. In

general, Mahmoodi and colleagues (2022) would argue that there is a severely insufficient amount of mental health literacy for students which is concerning because Ghafari and colleagues (2021) have noted the increase of mental disorders. This increase points to more than half of students experiencing symptoms of a mental disorder, particularly post pandemic, and are only receiving average support. Moshki and colleagues (2012) recognize this lack of support and have found that interventions including a focus on self-esteem and health locus of control predictors lead to mental health promotion. Health locus of control is how a person perceives their behaviour to be controlled by either external or internal factors (Moshki et al., 2012)

Mental Health in Bangladesh

In the previous section, I looked at mental health research of post-secondary students in South Asian countries and, due to scarcity of research, Bangladesh was not included. However, I will examine general mental health literature and common themes that exist such as the impact of the pandemic. Some of the research can be seen to look at specific geographic areas as Zaid and colleagues (2024) have done when studying common mental health problems associated with recovered COVID patients within the rural area. Their findings found an increase of depression, stress, and anxiety which were connected to sociodemographic factors. In contrast, Shahjahan and colleagues (2023) investigated the urban area and focused on adults which pointed to findings that advocated for the need of developing and improving mental health services. Other studies focus on specific populations and mental health related to COVID-19 such as older adults within Rohingya refugee camps, individuals diagnosed with a disability, and individuals with type two diabetes (Anwar et al., 2024; Hossen et al., 2024; Roy et al., 2023).

Another key theme is the research focus on women such as the study done by Koly and colleagues (2022) finding that there are barriers to women accessing mental health services.

These included low mental health literacy, stigma, and service unavailability. Koly and colleagues (2022) found that marital/spousal relationships had an impact on women's mental health. This draws a parallel with the literature regarding women's mental health in Bangladesh that focuses on mothers, pregnancy, and reproductive systems. An example includes research by Islam (2024) who studied unintended pregnancies and found a correlation with both sexual abuse and intimate partner violence. Other literature attempts to examine mental health determinants including a study by Sultana and colleagues (2024). This research found that more than half of their participants, mothers in Bangladesh, struggled with depression which was correlated with the wellbeing of their children. Koly and colleagues (2023) have contributed more to this general area of research by including the study of women who have had an abortion. This study found that access to affordable post-abortion care and mental health services is essential for decreasing depressive and anxiety symptoms among women particularly living in urban areas.

Societal Context: Bangladesh and Mental Health

Mental health research in Bangladesh is limited due to the lack of awareness and stigma that exists surrounding mental health which is the biggest barrier of accessing mental health care and conceals existing mental health problems (Faruk et al., 2023; Koly et al., 2024). This manifests into isolation as people will socially distance themselves from those struggling (Faruk et al., 2023). Literature highlights the large mental health treatment gap, within Bangladesh, amounting to more than 90% due to the lack of mental health literacy, availability of services, and stigma (Faruk et al., 2023; Koly et al., 2024). The stigma and discrimination encourages the government to continue with not prioritizing mental health policy and effective services (Hasan & Thornicroft, 2018). This is evident when examining the rates of psychiatrists and mental health professionals in Bangladesh which are the lowest in the world (Giasuddin et al., 2015). On

top of this, there are layers of other factors that affect the mental health of those living in Bangladesh such as financial strains which have worsened since the pandemic (Islam, 2021).

The Present Study: Critical Analysis of the Literature and an Under-Researched Area

Overall, mental health literature in Bangladesh is limited but there are certain populations that occupy that research space more than other groups. There is a specific group of individuals that do not receive as much prioritization, despite their mental health struggles, and this includes the post-secondary students in Bangladesh. Their situation is unique because their mental health struggles compile of moving parts in addition to other general factors. Rasheduzzaman and colleagues (2022) highlight their difficult position by researching their suicide rates. The research has determined several contributing factors of poor mental health including lack of accommodations, poor facilities, economic hardship, stress, and so on. The study pointed to political violence as being a stressor which is particularly relevant right now as university students have been protesting, since July 2024, against a quota reserving 30% of government jobs for descendants of war veterans (Al Jazeera, 2024; Amnesty International; Reuters, 2024).

With consideration of the complex mental health factors, there is a dire need for advocacy and improvement of support for post-secondary students in Bangladesh. An influential component that can help move towards this need is through increasing mental health research. There is a small selection that already exists, but it would be a critical contribution if these findings were to be compiled. This would provide a clear indication to interested researchers to understand available data. The hope would be that there is encouragement for further research and clear pathways that can assist with developing a plan for improving support. Thus, the aim of this scoping review is to map out the existing literature in regard to the general mental health of post-secondary students living in Bangladesh.

Methodology, Method, and Research Design

Methodology

Conducting A Scoping Review

For this study, the methodology I utilized is a scoping review and I will discuss the specific details of the method and search plan in the next section. Scoping reviews do not typically adhere to a theoretical framework. Although, I will expand upon the ontological and epistemological perspective I used to guide the lens in which I conducted my study.

To start, a scoping review can be understood as being a comprehensive study that identifies existing literature within a specific topic with the certainty that all literature has been captured (Arksey & O'Malley, 2005). I had decided that I wanted to conduct a scoping review earlier on because I knew that research in Bangladesh is limited. I had initially started with looking at mental health in South Asia then narrowed it down to Bangladesh and from there selected a specific population. Completing my literature review helped me navigate towards solidifying my study topic and validated that I do want to conduct a scoping review. From the literature review process, it was clear that post-secondary students in Bangladesh are struggling and there is not enough research which is crucial for advocacy and assisting with service implementation. I have chosen to do a scoping review because it is a good fit for this research since it brings together existing literature which makes the data more accessible and creates a pathway for change. This means that it may inspire further research especially because the scoping review will help identify any gaps and it can assist with identifying the types of support that would be helpful for the students by understanding the findings. This scoping review is a

powerful tool for service providers and advocacy workers to use as a means of figuring out how the mental health struggles of post-secondary students in Bangladesh can be addressed.

Ontological and Epistemological Perspective: Critical Social Sciences

The hope around inspiring change through this research is connected to the ontological and epistemological perspective I have adhered to which is critical social sciences. As Neuman and Kreuger (2003) describe it, critical social work researchers are action-oriented and they aim to use their data to lead to improvements. The research I conducted aligns with this as this scoping review reveals key problems surrounding the mental health of the students which can motivate service enhancement or creation. Critical social sciences raises the awareness of problems in an intentional manner to encourage investigation towards them which this study does since it highlights key struggles of post-secondary students in Bangladesh (Neuman & Kreuger, 2003). When looking specifically at the ontological perspective of critical social sciences, the nature of the research I conducted aligns with the understanding that reality is shaped through social, political, cultural, and other factors (Neuman & Kreuger, 2003). The majority of these factors showcase themselves within the findings of this scoping review. The epistemological perspective that critical social sciences adheres to values knowledge and views it as power through identifying that facts are not neutral meaning they must be questioned (Neuman & Kreuger, 2003). I believe the study correlates with this as the research itself goes against a common cultural perception of education which I have personally recognized within the Bangladeshi community. This perception is that education is something that needs to be prioritized at all costs making it essential. This same perception is reinforced by Bangladesh's government and system as well. Education is also often the center of conversations for adolescents and youth. There is a romanticization of education which disregards some of the

harmful effects that it is causing on students and this study aims to challenge this romanticization by revealing the mental health impacts.

To strengthen the critical social sciences approach of my study, I included a critical analysis section at the end, within the discussion part, to examine the research findings. I conducted this critical analysis by looking at all the findings and determined if there was something missing whether a voice or excluded questions. Moreover, I inspected the nature of the research, specifically the relationships and dynamics that exist. Notably, I have done my best to consider external factors that may not be overtly mentioned that could have influenced the study such as institutional or cultural components. Another important factor I considered is the geographic areas in which the data was collected and who was being selected to be a participant. These are just some of the critical components that I involved when I was dissecting the findings of the scoping review.

Method and Research Design

As mentioned previously, I have conducted a scoping review for this study and the specific model I followed is the one by Arksey and O'Malley (2005). This model consists of five stages including identifying the research question, identifying relevant studies, study selection, charting the data, and finally collating, summarizing and reporting the results.

Stage 1: Identifying the Research Question. The first stage identifies the research questions that will guide the scoping review. Arksey and O'Malley (2005) point to the importance of this stage as it will guide the search strategies which is why it is crucial to consider what aspects or facets of the research question are significant. With this in mind, I have created the following research questions for this scoping review: Firstly, what research exists pertaining

to the general mental health of post-secondary students in Bangladesh? Secondly, what do the findings of the research suggest about the overall and general mental health of post-secondary students in Bangladesh? The aspects being important here include what the results will showcase of the existing studies in terms of prevalent mental health challenges and factors or determinants.

Stage 2: Identifying Relevant Studies. For the second stage, Arksey and O'Malley (2005) have suggested that researchers develop a plan to conduct a comprehensive search for identifying studies and have recommended a number of search means. Due to time limitations and restrictions of being a sole researcher of this study, I selected to search through multiple electronic databases as my search plan for identifying studies. Additionally, I met with a University of York librarian who specializes in scoping reviews on October 15, 2024. In this meeting, we have collaborated to generate a comprehensive list of search terms in which I used to search the following four online databases: PsycINFO (Proquest), ERIC (OCUL), Social Work Abstracts (OVID), and Web of Science. The formulated search terms are the following: ("Mental Health" OR "Mental Illness" OR Suicid* OR Depressi* OR Anxiety OR Psychological OR Stress) AND (Bangladesh*) AND (Post-Secondary Student* OR University Student* OR Higher Education Student* OR Undergraduate Student*OR College Student* OR Tertiary OR Graduate Student*).

Stage 3: Study Selection. From this point, I moved onto stage three which is study selection through the implementation of an inclusion and exclusion criteria towards the search results from the four online databases (Arksey & O'Malley, 2005). In terms of the inclusion criteria, the studies that I included research the general mental health of post-secondary students who live in Bangladesh without predetermining or intentionally studying a specific possible cause or correlation. Notably, the included studies were written in English (so I am able to

examine the research appropriately), peer reviewed and accessible. Studies that were included were published before January 11, 2025 as this is when I began the research. There was no time frame restriction for the year of publication for the studies since this research is already highly limited. In terms of the exclusion criteria, I eliminated studies that are not focused on post-secondary students who reside in Bangladesh which means even if the students were Bangladeshi, but living elsewhere, then the research was excluded. Additionally, I excluded studies that were measuring or trying to prove an additional correlation or causation, in other words, an extra or third factor. Thus, studies that were trying to predetermine or intentionally study a specific external circumstance were excluded. To provide an example, there are multiple studies that are researching the mental health of post-secondary students in Bangladesh but specifically in regard to phone usage or COVID-19 related impacts and I have excluded these studies with an additional layer.

After searching the online databases with the key words, I screened the yielded results by title and abstract by applying the created exclusion and inclusion criteria. When I was confused by whether or not I should include an article after screening the title and abstract, I obtained the full text and did a full text review to determine whether the study would be excluded. A full text review means reading the entire article so more details can be gathered regarding the study and applying the criteria to appropriately decipher whether the study will be used for the scoping review (Arksey & O'Malley, 2005). With searching using the key words, Social Work Abstracts (OVID) yielded 621 articles, Web of Sciences yielded 281 articles, PsycINFO (Proquest) yielded 186 articles, and ERIC (OCUL) yielded 33 articles. After screening by title and abstract, as well as potentially full text, through the criteria, 18 articles were selected from Web of Sciences, 13 articles were selected from PsycINFO (Proquest), one article was selected from ERIC (OCUL),

and no articles were selected from Social Work Abstracts (OVID). I then compiled all of the selected articles from each database and removed any duplicates which left me with a total of 21 articles. The 21 articles underwent a full-text assessment to officially determine their eligibility to be included within the study. In the end, I excluded 2 of the 21 articles after a full-text assessment and was left with a final number of 19 selected studies which were used for this scoping review. Please refer to Figure I which displays a PRISMA Flow Chart that reflects the search and screening process.

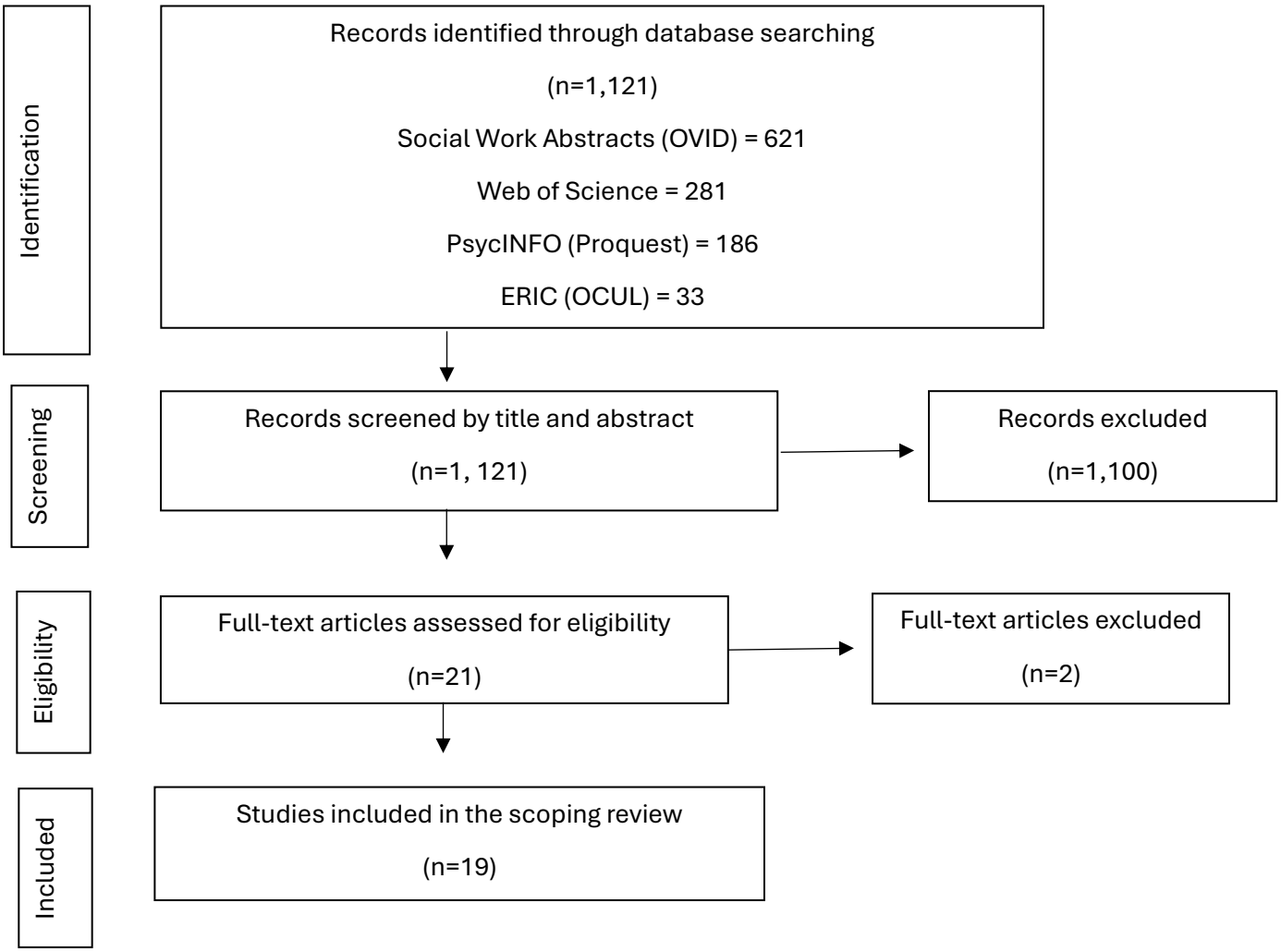

Figure I. PRISMA Flow Chart of the search and screening process.

Stage 4: Charting the Data. Stage four is charting the data where all the information of the studies is organized into a chart following a 'narrative review' approach (Arksey & O'Malley, 2005). This approach allows readers to understand the process of each study making the outcomes contextualizable and comparisons between studies easier (Arksey & O'Malley, 2005). Arksey and O'Malley (2005) have presented examples of what charting topics could look like, but it is essentially the decision of the researcher to generate them. Using the examples, I have formulated the following charting topics: for column #1 I have the author's name, year of publication, and study location; column #2 have the aims of the study; column #3 have the sample size and the study population; column #4 have the methodology and methods; and column #5 have the key results. I intentionally excluded an intervention charting topic because I did not specifically look for or analyze interventions. Additionally, most of the studies that I have selected did not include or focus on interventions. I believe the charting topics I have selected allows readers to effectively understand the studies and digest the findings that arise from the research. I used the chart to code the studies and I printed the chart to hand-highlight key results as well as common themes which was essential for stage 5. Please review Table I in the appendix to see the chart revealing the full list of the 19 selected articles and the synthesized results.

Stage 5: Collating, Summarizing, and Reporting the Results. After charting the data, I then moved onto the final stage noted by Arksey and O'Malley (2005) which is collating, summarizing, and reporting the results. Arksey and O'Malley (2005) identify two ways in which they have presented findings through a narrative account and I incorporated both within my analysis. Since scoping studies do not attempt to assess the quality of evidence, rather they try to showcase an overview of the literature, the information can be presented through a generical and

numerical analysis (Arksey & O'Malley, 2005). For this study, this looked like discussing the geographic locations of the studies, the study populations, the methodologies used, and overall, how the study was conducted in measuring the mental health of the students. As Arksey and O'Malley (2005) describe it, the purpose of this is to bring awareness to the dominant areas of the research and expose any gaps. The second way that findings are presented involves organizing the literature thematically and I applied this to my research by highlighting the themes of the findings (Arksey & O'Malley, 2005). In addition to this, I included a brief critical analysis of the findings within the discussion section.

Ethical Considerations

I wanted to bring attention to the ethical considerations of this study which revolve around my own positionality and subjectivity. Since I am Bangladeshi myself, as well as a post-secondary student, there is a strong connection between the research and myself. This research process was deemed to be challenging at times for multiple reasons especially in terms of being biased and doing my best to recognize when I was being biased to be able to present an honest scoping review along with its findings. Though I put in my best efforts, it is important to acknowledge that this bias does exist and I come from a background of seeing some of the harmful implications of Bangladeshi culture on the mental health of individuals, especially those who are in school and studying. Additionally, it has not been easy to read some of the research and see the poor mental health state of post-secondary students in Bangladesh. There were times where reading this research was emotionally taxing and I had to make a decision to take a break in order to focus on my own mental health as the topic is so personal. In the end, I have done my best to remain unbiased as possible and take the time needed to take care of my mental health in hopes of presenting a truthful scoping review and findings of the literature.

Findings

Generical and Numerical Analysis of Findings: Study Characteristics

In terms of the year of publication for the studies, the 19 selected studies have all been published between the years of 2019 to 2024. In regard to study location, 7 of the studies looked at institutions across Bangladesh, 5 looked specifically at Jahangirnagar university in Dhaka, and 2 looked at Dhaka University in Dhaka; notably, Dhaka is the capital city of Bangladesh (Antora et al., 2024; Faruk et al., 2021; Hussain & Shova, 2024; Hossain et al., 2022; Hossain et al., 2019; Islam et al., 2022; Kabir et al., 2021; Mamun et al., 2022b; Mamun et al., 2020; Ovi et al., 2024; Rasheduzzaman et al., 2022; Rahman et al., 2022; Rasheduzzaman et al., 2021; Urme et al., 2022). The following locations had one study dedicated to these regions including a study conducted on major cities within Bangladesh, the Northern region of Bangladesh (Rajshahi division), the Southern territory, looking at urban and suburban areas, and a university in the city of Gopalganj (Bhattacharjee et al., 2021; Kamruzzaman et al., 2024; Koly et al., 2021; Mamun et al., 2022a; Sayeed et al., 2023). Furthermore, the aims of the study vary with 6 exploring suicide; 5 exploring depression; 3 exploring depression and anxiety, 3 exploring depression, anxiety, and stress, and 2 exploring the overall mental health of students. Sample sizes varied with the lowest sample size being 13 and the highest sample size being 2036 (Mamun et al., 2020; Ovi et al., 2024). With regard to study population, 5 studies were conducted among undergraduate students, 4 studies were on students that were not identified as being undergraduate or postgraduate, and 3 were on undergraduate and postgraduate students. One study was conducted on each of the following populations including engineering students, medical students, first year students, dental students, international dental students, tertiary level students (graduate and postgraduate), and university students as well as close friends, roommates, and teachers of students who

committed suicide. Of all the selected studies that shared the ages of participants, the youngest participants were 18 years old and the oldest were 32 years old. In terms of the methodology or methods used within the selected studies, 14 of them used a questionnaire or survey which were almost all cross-sectional studies, 2 conducted interviews, 2 used secondary information, and 1 conducted a longitudinal study.

Thematic Analysis of Findings

Part A: Prevalent Mental Health Challenges

Suicide and Suicidal Behaviours. The most prevalent mental health challenges that was explored by 6 of the selected studies includes suicide and suicidal behaviours. Suicide rates in Bangladesh are relatively high as Hossain and Shova (2024) looked at 104 suicide cases from 2005 to 2022 with 75 cases from public universities, 7 from private universities, and 22 from medical colleges. Mamun and colleagues (2022a) found, in their study of 665 students, that 61.1% experienced lifetime suicidal ideation with 14.7% being in the past year. Another study by Mamun and colleagues (2020) investigated 22 months of medical student suicide reports from January 1, 2018 to November 30, 2019 and found 13 total cases with 9 of them from public colleges. Rasheduzzaman and colleagues (2022) found that 13.4% had past-year suicidal ideation, 6% had lifetime suicide plans, and 4.4% had about one lifetime suicide attempt out of their 1844 participants. Similarly, Rahman and colleagues (2022) found that 13.8% of their study on 407 students experienced past-year suicidal ideation. Additionally, a study by Urme and colleagues (2022) explored suicide factors by interviewing 35 participants which were students and close friends, roommates, and teachers of students who committed suicide. This study found that suicidal ideation, behaviour, and attempts were related to gender and economic conditions (Urme et al., 2022).

Depression, Anxiety, and Stress. Furthermore, 5 of the selected studies focused on depression with one focusing on its prevalence and associated factors among 803 engineering students (Antora et al., 2024). Kabir and colleagues (2021) studied 200 international dental students and found that 51.2% of them had depression. Similar findings by Koly and colleagues (2021) revealed that 47.3% of their 400 participants, undergraduate and post graduate students, had moderate to severe depression. Sayeed and colleagues (2023) also found that 47.1% of their sample size of 403 participants, undergraduate and postgraduate students, suffered from depressive symptoms. Contrastingly, Rasheduzzaman and colleagues (2021) found slightly lower rates of 28.70% among their 1844 undergraduate students in regard to experiencing moderate to extremely severe depression.

Depression and anxiety together were found to be prevalent by 3 of the selected studies. A study by Faruk and colleagues (2021) on 468 dental students found that 27.4% were suffering from moderate to severe depression and this number was 18.2% for anxiety. A longitudinal study conducted by Hossain and colleagues (2019) on 1140 students found, within the follow-up survey, that the prevalence rate for provisional depression was 74.1% and this number was 61.9% for provisional anxiety. Additionally, a study conducted on 400 first year students by Islam and colleagues (2022) found that 69.5% had moderate to extremely severe levels of depression and this number was 61% for anxiety.

Depression, anxiety, and stress together were also seen to be prevalent by 3 of the studies. Hossain and colleagues (2022) found that, out of their study among 351 students, more than half had moderate levels of depression, more than 40% had extremely severe anxiety levels, and 45% reported having moderate to severe levels of stress. Kamruzzaman and colleagues (2024) found in their study of 738 students that 57% had normal levels of depression, one third reported

symptoms of anxiety, and 25% had signs of stress while 75% had normal stress levels. The third study by Mamun and colleagues (2022b) discovered that, out of the 590 students, 52.2% had moderate to extremely severe depression, 58.1% had moderate to extremely severe anxiety, and 24.9% had moderate to extremely severe stress.

Overall Mental Health. Out of the selected studies, 2 brought attention to the overall mental health of students with the first being a study by Ovi and colleagues (2024) who found that, of their sample size of 2036 undergraduate and postgraduate students, 55.9% reported having poor mental health. With knowing the poor mental health of students, the second study by Bhattacharjee and colleagues (2021) explored the key themes discussed by students in regard to identifying social determinants of mental health.

Part B: Identified Mental Health Factors and Determinants

Females. More than half (11) of the total studies found that being a female was a factor and determinant for mental health struggles. The study done by Faruk and colleagues (2021) found that being a female was a risk factor for depression as they reported a 29.7% rate, in comparison to males who had a 19.8% rate, out of 468 dental students. Likewise, Kabir and colleagues (2021) found that out of their female participants, which was 78.5% of their sample size being 200 students, 52.2% suffered from depression. Rasheduzzaman and colleagues (2021) also found females to be a risk factor for depression in their study of 1844 undergraduate students. Hossain and colleagues (2019) found similar correlations and determined that being a female was a critical risk factor for both depression and anxiety when studying 1140 undergraduate students. Hossain and colleagues (2022) explored anxiety, depression, and stress among 351 students and found that females had higher stress levels by 10% and higher rates of extremely severe levels of anxiety. Specifically, more than half of the females reported

experiencing extremely severe anxiety while this number was about 35% for males (Hossain et al., 2022). A study conducted on 738 students by Kamruzzaman and colleagues (2024) also explored anxiety, depression, and stress rates, finding that being a female was a risk factor for all three mental health struggles.

Females have been reported to make up large percentages of suicides which is seen in the study by Mamun and colleagues (2020) who looked at suicide reports specifically among medical students. They were able to identify 13 suicide cases after investigating 22 months of medical student suicide reports in Bangladesh from January 1, 2018 to November 30, 2019 and found that 8 of the cases were female students (Mamun et al., 2020). On the other hand, Urme and colleagues (2022) studied suicides more generally in Bangladesh and among 5 universities in which they found that, of the students who committed suicide, 17 were male and 13 were female. Their findings indicate that male students were more likely to commit suicide while female students made more suicide attempts (Urme et al., 2022). Notably, the reasoning behind male suicides were mainly connected to economic downturn and less emotional expression while the common reasoning for female suicides was due to relationship problems (Urme et al., 2022). A study by Rasheduzzaman and colleagues (2022), conducted on 1844 students, adds to the research done by identifying their findings of females having higher rates of all suicidal behaviours which includes suicidal ideation, planning, and attempts. Rahman and colleagues (2022) would agree with Rasheduzzaman and colleagues (2022) as they found that being a female was a significant risk factor for suicidal ideation in their study of 407 students.

The overall mental health of female students has been found to be poorer than male students which has been identified by Ovi and colleagues (2024) with their study of 2036 undergraduate and postgraduate students. In this study, female students reported a higher

percentage of poor mental health which was 62.9% in comparison to their male counterparts who were 1.49 times more likely to have good mental health (Ovi et al., 2024). The majority of the studies discuss contributors of the poor mental health and suicidal behaviours of female students. These include social stigma, gender differences and roles, nature of personality, educational environment, relationship difficulties, socio-cultural factors, poor ability to cope with stress, disempowerment, psychological fragility, cultural implications, and socioeconomic factors (Hossain et al., 2022; Hossain et al., 2019; Ovi et al., 2024; Rasheduzzaman et al., 2022; Rahman et al., 2022; Rasheduzzaman et al., 2021; Urme et al., 2022).

Financial and Economic Condition. Another commonly identified theme in regard to mental health factors includes financial and economic conditions which can be seen to be discussed in about half (9) of the selected articles. Bhattacharjee and colleagues (2021) found that, in their study of 38 undergraduate students, economic condition was the most discussed topic and was connected to being a significant social determinant of mental health. Moreover, Hossain and colleagues (2019) found that financial condition was a critical risk factor for depression and anxiety among 1140 undergraduate students. Kabir and colleagues (2021) would agree with the connection between financial difficulty and depression as they found that 77.3% of their sample size, 200 international undergraduate dental students, were struggling financially and with depression. Financial difficulty was identified as a significant factor as those struggling with finances were 2.62 times more likely to suffer from depression than those who were not (Kabir et al., 2021). Mamun and colleagues (2022b) found that being from a lower-class family was a significant risk factor for depressed students in their study of 590 undergraduate students. Correspondingly, Sayeed and colleagues (2023) studied 403 undergraduate as well as postgraduate students and found that those who self-reported receiving an insufficient monthly

allowance from their family were at a higher risk of depressive symptoms. Additionally, Faruk and colleagues (2021) identified that being from a lower or middle class family was a risk factor for anxiety in their study of 468 dental students. In contrast, Kamruzzaman and colleagues (2024) looked at the economic condition of participants' parents within their study of 738 students. This study found that having a higher parental income was a factor for depression (Kamruzzaman et al., 2024).

In terms of suicide rates, economic conditions were related to suicidal ideation, behaviours, and attempts (Urme et al., 2022). This was found by Urme and colleagues (2022) who investigated common suicide risk factors by interviewing 35 students and close friends, roommates, and teachers of students who committed suicide. As previously mentioned, this study found that the identified reasons for suicide among males was connected to economic downturn and finding employment (Urme et al., 2022). The study found socio-economic class to be correlated to suicidal ideation as most public university students in Bangladesh come from a lower to middle class family and are facing an economic crisis making it difficult to concentrate on education (Urme et al., 2022). Rahman and colleagues (2022) would agree with this as they discovered that students with lower socio-economic status were at a significantly higher risk of suicidal ideation in their study of 407 university students. Hussain and Shova (2024) confirmed that one of the reasons why students committed suicide was due to family crisis and poverty along with long-term unemployment when analyzing 104 student suicide cases.

Academic Year of Study. The academic year of study was an important mental health factor for students and was found in a little less than half (8) of the selected studies. When looking at mental health struggles, Rasheduzzaman and colleagues (2021) found that depression risk factors included being a newer student and a fourth year student. Islam and colleagues

(2022) conducted a study on 400 first year students and found that the prevalence rate for moderate to extremely severe levels of depression was 69.5% and 61% for anxiety. Sayeed and colleagues (2023) found that second year students were 3.4 times more likely to experience depression while third year students were 3.8 times more likely, and fourth year students were 3.9 times more likely in comparison to first year students. When looking at international dental students, third year students were more likely to suffer from depression as Kabir and colleagues (2021) found in their study of 200 participants. Koly and colleagues (2021) found that depression was higher in those who lost a year of their studies who made up 13% of all participants with the sample size of 400.

When looking at suicide, Mamun and colleagues (2020) identified that 7 of the 10 suicide cases, that reported the student's academic year, were in their final stages of study. Year of study was seen to be a risk factor for all suicidal behaviours including ideation, planning, and attempts as found by Rasheduzzaman and colleagues (2022). In a study by Rahman and colleagues (2022), fifth year students were significantly more likely to experience suicidal ideation. This study found that first year students were 0.15 times less likely than those in their fifth year to have suicidal ideation (Rahman et al., 2022). Similarly, second year students were 0.22 times less likely than those in their fifth year to have suicidal ideation (Rahman et al., 2022).

History of Mental Health: Personal and Family. Another determinant that is shared amongst a little less than half (8) of the studies includes the mental health history, both personal and familial, of participants. In terms of personal history, Koly and colleagues (2021) studied 400 undergraduate as well as postgraduate students and found that depression rates were higher among those with a personal history of depression. These students were 2 times more likely to experience depression in comparison to students who did not have a depression history (Koly et

al., 2021). Likewise, Sayeed and colleagues (2023) studied 403 undergraduate as well as postgraduate students and found that those with a history of suicidal attempts were at a higher risk of depressive symptoms. Past-year mental illness and past-month suicidal ideation, planning, and attempts were identified as factors for depression and anxiety by Faruk and colleagues (2021) from their study of 468 dental students. In regard to suicide, Mamun and colleagues (2022a) found that psychopathology was a significant risk factor for experiencing past-year suicidal ideation when conducting a study on 665 students. Urme and colleagues (2022) identified that a suicide risk factor includes having a personal history of suicide attempts as identified through 35 interviews. Past-year mental health suffering has been found to be a risk factor for all suicidal behaviours including ideation, planning, and attempts as found from a study on 1844 undergraduate students (Rasheduzzaman, 2022). A different study, with the same sample size of 1844, by Rasheduzzaman and colleagues (2021) found that 76.4% of the students who reported past-month suicidal ideation were struggling with depression. This depression rate was only 23.6% of the participants who did not struggle with past-month suicidal ideation (Rasheduzzaman et al., 2021). Other factors significantly associated with depression included past-year suicidal ideation, lifetime suicidal ideation, lifetime suicide plan, and lifetime suicide attempt (Rasheduzzaman et al., 2021).

With regard to family history, Faruk and colleagues (2021) found that a family history of mental illness, suicide attempts, and completed suicides was a factor for depression and anxiety in their study of 468 dental students. Koly and colleagues (2021) would agree with this since they found that depression rates were higher among those with a family history of depression among 400 students. Rasheduzzaman and colleagues (2022) conducted a study on 1844 undergraduate students which found a few correlations in terms of family history. Firstly, a

family history of suicide and psychiatric illness was found to be significant factors for all suicidal behaviours which include suicidal ideation, planning, and attempt (Rasheduzzaman et al., 2022). Furthermore, a family history of either mental illness or suicide attempt was a risk factor for suicidal ideation (Rasheduzzaman et al., 2022). Thirdly, a family suicide attempt history was found to be a risk factor for attempting suicide (Rasheduzzaman et al., 2022). In another study with the same sample size of 1844, Rasheduzzaman and colleagues (2021) found that a family history of mental illness and of suicide, completion and attempts, were depression risk factors. Notably, Rahman and colleagues (2022) confirmed that a family history of suicide was a significant factor for experiencing suicidal ideation within their study of 407 students.

Substance Addiction. Moreover, substance addiction is a factor that a little less than half (8) of the studies have discussed in their findings. To begin with, Hossain and colleagues (2019) did find that alcohol consumption was a critical risk factor for depression and anxiety. In another study by Koly and colleagues (2021) where 400 students were studied, smoking in male participants was found to be associated with moderate to severe depression. Mamun and colleagues (2022b) had similar findings identifying that cigarette smoking was a significant depression risk factor. Contrastingly, Rasheduzzaman and colleagues (2021) did not find that cigarette smoking was associated with depression but did find that psychoactive substance use was significantly associated.

In the other study by Rasheduzzaman and colleagues (2022), it was found that cigarette smoking had a significant association with suicide planning and attempts. This study also found that psychoactive substances were a significant risk factor for all suicidal behaviours including ideation, planning, and attempts (Rasheduzzaman et al., 2022). Similar findings were discovered by Rahman and colleagues (2022) as they identified that students who had a smoking habit were

significantly more likely to experience suicidal ideation. The study conducted by Urme and colleagues (2022) identified that substance use was one of the factors related to suicide. Additionally, Hussain and Shova (2024) identified that one of the reasons responsible for suicide included addiction within their explorative study of suicide causes among 104 cases.

Family. Another popular theme that more than one third (7) of the selected articles shared was how aspects and influence of family is a mental health determinant for students. Antora and colleagues (2024) found within their study of 803 engineering students that family support and bonding was negatively correlated with Major Depressive Disorder which means that strong family relationships are crucial for wellbeing. Bhattacharjee and colleagues (2021) would agree with this as they found family to be a social determinant of mental health and this was the second most talked about factor among the 38 participants. The study by Hossain and colleagues (2022) displays the effects that family can have on students' mental health as they found that students who lived in a hall or mess reported more depression than those who were living at home with their family. Furthermore, having relationship and family problems was identified as a risk factor for all suicidal behaviours including ideation, planning, and attempts by Rasheduzzaman and colleagues (2022). A different study by Rasheduzzaman and colleagues (2021), with the same sample size, found that experiencing relationship and family problems was also a risk factor for depression. Notably, family type can have an impact on students' mental health which is identifiable in the study by Kamruzzaman and colleagues (2024) which found that moderate levels of depression were 32% lower among those from an extended family in comparison to students from nuclear families. This study indicated that being from a family with four or less members was a risk factor for stress (Kamruzzaman et al., 2024). The study found that the likelihood of moderate stress levels was 35% lower among those from extended families

versus nuclear (Kamruzzaman et al., 2024). Hossain and colleagues (2022) found that participants from nuclear families had more extremely severe levels of anxiety than those from joint families. This study also found that a depression risk factor includes being the first child of the parents (Hossain et al., 2022). Another finding of how family can have a negative impact is seen in the study by Hossain and colleagues (2019) who found that family was one of the multiple reasons as to why students experienced tension within their study of 1140 undergraduate students.

Social Media and Screen Time. A little more than one third (7) of the selected studies found that social media and screen time was connected to the mental health of students. To start with, Islam and colleagues (2022) found that students who were using the internet for less than 2 hours daily were 0.53 times less likely than students who used the internet more than 4 hours daily to be depressed. This study found that students using the internet 2 to 4 hours daily were 0.56 times less likely than those using the internet for more than 4 hours daily to be depressed (Islam et al., 2022). In agreement, using the internet for more than 5 hours daily was found to be a significant risk factor for depression and stress as identified by Mamun and colleagues (2022b). Additionally, a study by Koly and colleagues (2021) found a few correlations including that depression was found to be higher in those who spent more than 6 hours daily on social media. Factors for moderate to severe depression included using social media for 6 or more hours daily and those who spent more than 6 hours were 4.5 times more likely to experience depression (Koly et al., 2021). Correspondingly, a critical risk factor for depression and anxiety included high and excessive recreational screen time by Hossain and colleagues (2019). On the other hand, Antora and colleagues (2024) found that social media was a less predictive determinant but

still positively related to Major Depressive Disorder within their study of 803 engineering students.

Mamun and colleagues (2022a) found that Facebook addiction was a factor for past-year suicidal ideation and was significantly associated with suicidal ideation. Although, this study did not find an association between past-year suicidal ideation and smartphone addiction (Mamun et al., 2022a). Hussain and Shova (2024) would agree as they found that dependency on virtual relationships, technology, and less demand on social relationships were linked to suicide reasons.

Academic Performance. About one third (6) of the selected studies discuss the factor of academic performance and its influence on students' mental health. Notably, Bhattacharjee and colleagues (2021) label academic performance as the most discussed theme among their 38 participants in identifying it as a social determinant of mental health. Depression was found to be higher in students who felt unsatisfied with their academic performance and these rates would vary from moderate to severe as seen in the study by Koly and colleagues (2021). In addition to this, Urme and colleagues (2022) found that academic persecution and stress was suggested to enhance depression. In terms of engineering students, Antora and colleagues (2024) found that education issues were less predictive but were still positively related to Major Depressive Disorder. Furthermore, Hossain and colleagues (2019) found that study and career are identifiable reasons for tension experienced by students. This study also found that dissatisfaction with current education was a critical risk factor for depression and anxiety (Hossain et al., 2019). In terms of suicide, the study by Hussain and Shova (2024) identifies suicide reasons to include academic pressure and poor academic performances particularly with examination.

Past Negative Experiences. About one third (6) of the selected studies found that having past negative experiences was a mental health factor for students. In the study by Antora and colleagues (2024), past negative experiences was one of the most predicting determinants for Major Depressive Disorder among engineering students. Similar findings were discovered within a study of 403 students by Sayeed and colleagues (2023) who related higher risk of depressive symptoms with those who had a history of stressful life events. Likewise, Rasheduzzaman and colleagues (2021) found that experiencing a past-year stressful life event was a risk factor for depression in their study of 1844 students. Additionally, past-year post-traumatic events were identified as a risk factor for depression and anxiety by Faruk and colleagues (2021) from their study of 468 dental students.

Moreover, experience of past-year stressful life events has been found to be a risk factor for all suicidal behaviours including ideation, planning, and attempts as found by Rasheduzzaman and colleagues (2022). These findings align with the study by Rahman and colleagues (2022) which identified that experiencing past-year traumatic events was a significant risk factor for suicidal ideation in their sample size of 407 students.

Romantic Relationships. Lastly, another theme in regard to the compiled findings include romantic relationships as being a mental health factor within a little less than one third (5) of the studies. Articles that mentioned relationships being a factor, without identifying what type of relationship, were excluded from this theme discussion. Kamruzzaman and colleagues (2024) found that single students, in comparison to married students, were 2.50 times more likely to experience severe anxiety levels. This study also identified being unmarried as a factor for depression, anxiety, and stress (Kamruzzaman et al., 2024). Comparably, Mamun and colleagues (2022b) found that being in a relationship was a significant risk factor for anxiety and stress

among 590 students. In general, Bhattacharjee and colleagues (2021) found that, among the 38 participants, romantic relationships were discussed to be a social determinant of mental health.

A study by Mamun and colleagues (2022a) found that students who were separated or divorced had higher rates of past-year suicidal ideation while students in relationships had the second highest rates within their study of 665 students. Being separated or divorced was a significant risk factor for suicidal ideation as well (Mamun et al., 2022a). Similarly, Hussain and Shova (2024) have identified that one of the reasons connected to suicide was failure of love.

Additional Mental Health Factors. The selected studies mention other mental health factors that were not grouped within the themes as they were not as prevalent and did not show up as much within the compiled findings of all the studies. These factors include: unhealthy lifestyle, education-related issues, personal relationship issues, religion, being raised in a certain geographic area, physical health issues, social expectations, life frustration, loneliness, lack of counselling opportunities, poor socialization or social problems, crisis of moral education and degradation of morality/ethics, social inequality, living conditions, residence, university culture, sleep, physical inactivity, meal intake, age, studying in private versus public institution, field of study, poor interactions with teachers, transport facility, adaptation problems, being ragged by other students, exam failure, experiencing bullying, general relationship problems, perfectionism, being influenced by the suicide of another student, and unwillingness to seek counselling services mainly due to stigma (Antora et al., 2024; Bhattacharjee et al., 2021; Faruk et al., 2021; Hussain & Shova, 2024; Hossain et al., 2022; Hossain et al., 2019; Islam et al., 2022; Kamruzzaman et al., 2024; Kabir et al., 2021; Koly et al., 2021; Mamun et al., 2022b; Mamun et al., 2020; Ovi et al., 2024; Rasheduzzaman et al.,, 2022; Rasheduzzaman et al.,, 2021; Urme et al., 2022).

Discussion

Summary of Findings and Addressing the Knowledge Gap

The findings of this scoping review indicate that the existing research, pertaining to the general mental health of post-secondary students in Bangladesh, highlights that there is poor mental health among this population. The research emphasizes prevalent mental health challenges including suicide, suicidal behaviours, depression, anxiety, stress, and struggling overall with mental health. The common determining mental health factors of the compiled findings included being a female, financial and economic condition, academic year of study, history of mental health both personal and familial, substance addiction, family, social media and screen time, academic performance, past negative experience, and romantic relationships.

Furthermore, the findings of this scoping review accurately encapsulates the existing literature surrounding the general mental health of post-secondary students living in Bangladesh. As the goal of a scoping review is to provide an overview of all the existing material within a specific area, the dominant areas of research are noticeable through reviewing Table I (Arksey & O'Malley, 2005). Additionally, reviewing the table also provides an opportunity for readers to recognize the studies that have discovered different findings or have narrowed down their study population to research specific gaps within the existing and dominant literature. When compared to existing literature, this study brings emphasis to the prevalent mental health challenges and most common risk factors that students in Bangladesh face while also bringing attention to under-researched areas. The most prevalent mental health challenges and study focus being suicide and suicidal behaviours with depression being a close second (Antora et al., 2024; Hussain & Shova, 2024; Kabir et al, 2021; Koly et al., 2021; Mamun et al., 2022a; Mamun et al., 2020; Rasheduzzaman et al., 2022; Rahman et al., 2022; Rasheduzzaman et al., 2021; Sayeed et

al., 2023; Urme et al., 2022). While the most prevalent risk factors shared amongst the selected studies included being a female, financial and economic condition, academic year of study, having a mental health history both personal and familial, and substance addiction (Bhattacharjee et al., 2021; Faruk et al., 2021; Hussain & Shova, 2024; Hossain et al., 2022; Hossain et al., 2019; Islam et al., 2022; Kamruzzaman et al., 2024; Kabir et al., 2021; Koly et al., 2021; Mamun et al., 2022a; Mamun et al., 2022b; Mamun et al., 2020; Ovi et al., 2024; Rasheduzzaman et al., 2022; Rahman et al., 2022; Rasheduzzaman et al., 2021; Sayeed et al., 2023; Urme et al., 2022).

While the common research areas have been noted, there are contradictions within the research that go against the dominant findings also charted in Table I. These contradictions may be because of a number of things including when, where and how the study took place and who was chosen to be part of the study. Specific examples of contradictions include the study by Hossain and colleagues (2022) which reported that no students had extremely severe stress levels out of the 351 participants. A couple of contradictory findings were discovered by Kamruzzaman and colleagues (2024) with their study of 738 students which found that 57.45% did not suffer from depression, 29% were not struggling with anxiety, and 74.39% did not experience stress. Although, it has been highlighted that these mental health challenges did exist but on ‘normal’ levels in which students were not struggling or suffering (Kamruzzaman et al., 2024). Similarly, Sayeed and colleagues (2023) found that, out of 403 students, 52.9% did not show any depressive symptoms. Another finding revealed that some of the identified depression factors include having a father in service or other occupation and having a higher parental income which goes against previous findings in literature of the risk factor being from a middle to low class family (Kamruzzaman et al., 2024). Moreover, Rasheduzzaman and colleagues (2021) did not determine that a depression risk factor was cigarette smoking among 1844 students. A study by

Islam and colleagues (2022) found that there were no significant gender differences when measuring prevalent rates for moderate to extremely severe levels of depression and anxiety among 400 first-year students. Another study that found no significant gender differences in terms of all suicidal behaviours (ideation, planning, and attempts), with the exception of past-year suicidal ideation, is seen within the study by Mamun and colleagues (2022a). Additionally, a study by Ovi and colleagues (2024) confirmed that they did not recognize academic year as affecting poor mental health levels since the rates varied from 51.9% to 57.3% regardless of academic year among 2036 students. In terms of suicide, Urme and colleagues (2022) found that male students committed suicide more than females who were more apt to attempt when interviewing 35 students and friends, roommates, and teachers of students who committed suicide. Charting the findings within this area of the research, including uncommon themes, adds to the literature because it has created a place where individuals can pinpoint the different fields of existing research within this topic.

To end off this summary and review, it is noteworthy to mention that this scoping review has addressed the research and knowledge gap by answering the following research questions: What research exists pertaining to the general mental health of post-secondary students in Bangladesh? What do the findings of the research suggest about the overall and general mental health of post-secondary students in Bangladesh? By doing this, this scoping review has successfully compiled the existing literature pertaining to the general mental health of post-secondary students in Bangladesh and has created a study which displays the findings, dominant areas of research, under-researched areas, and research gaps of this topic.

A Brief Critical Analysis of the Findings

Throughout the research and charting process, a document was made to keep track of critical notes and ideas that surfaced. During the screening and selection period, it was noticeable that there were very limited studies regarding the mental health among post-secondary students in Bangladesh prior to the COVID-19 pandemic. During and after the pandemic, this field of research grew with most studies focusing on the pandemic's effect on students' mental health. A critical question would be, why the mental health of students in Bangladesh was not a prioritized area of research prior to the pandemic? Especially since the literature points to how this population struggles with complex mental health issues intertwined with varying factors. Additionally, study locations are mainly situated within Dhaka which is Bangladesh's capital city. The curiosity here is whether the data would look different if more of the research was conducted on universities that are located outside of cities. Furthermore, all the studies include participants that are younger than 32 years and points to a severely under researched area of older students. Thus, another critical idea to take into reflection is what different mental health determinants and struggles may arise if the research started to focus on students older than 32 years. It is notable that the majority of the data focuses on university students in general and not with distinction of students studying specific disciplines or fields. It would be critical to study the differences between the fields and it may have cultural implications of how certain fields are viewed in Bangladesh especially since academic performance is a key mental health determinant as identified with this scoping review. To extend on this point, there is a lack of discussion around culture within the existing literature in regard to its impact on mental health and whether it intertwines with risk factors. This leaves another gap and missed opportunity to critically approach this research topic as Bangladesh has a strong culture. After reviewing the literature, it is hard to not wonder the ways in which culture, possibly society and religion, has influenced the

mental health determinants identified by students. Moreover, there is a lack of studies looking at the connection between the political state of Bangladesh and how it is affecting individuals, especially post-secondary students. This is particularly relevant now with recent student protests against a quota reserving government jobs for descendants of war veterans (Amnesty International, 2024). Lastly, 6 of the selected studies focus on suicide and suicidal behaviours with half identifying being a female as a risk factor (Mamun et al., 2020; Rasheduzzaman et al., 2022; Rahman et al., 2022). This leads to the questioning of whether females in Bangladesh are facing unique gender-related factors that are negatively impacting their mental health. This may be a critical theme as suicide trends in Western societies, especially the United States, points to males making up the majority of suicide rates in comparison to females especially those who are around middle age (Trgovac et al., 2015).

Positionality and Subjectivity

When conducting research, it is important for the researcher to reflect on their own positionality and subjectivity towards the study as each of us carry these biases and it does influence the ways in which we approach research.

To begin with, I wanted to identify that I am Bangladeshi and come with preconceived notions that I have carried into this research project. Notably, I did not grow up in Bangladesh but rather in Canada. This means that, although I have knowledge on the culture, I have not lived in Bangladesh and will admit to not knowing the full extent of the culture and norms that exist there. With that being said, from my knowledge, I heavily side with the notion that mental health is neglected within the Bangladeshi community. I believe Bangladeshi people, especially those who live in Bangladesh, adhere to conservative values especially surrounding gender stereotypes and hierarchical power structures. I believe this system has created and encouraged negative

mental health stigmas especially since it is a collectivist community. This means that individuals rarely prioritize their own needs leading to mental health challenges being normalized and even appraised as it indicates hard work—a common notion I have heard. I would like to acknowledge that there has been some effort to involve the conversation of mental health within Bangladesh and Bangladeshi culture, but this seems to be a slow process. I truly believe that increased mental health research can help advocate for these mental health challenges in Bangladesh.

Inherently, I am expecting that my research showcases that the mental health among post-secondary students in Bangladesh is very poor especially due to that academic pressure component on top of the culture of neglecting self needs. This meant that I had to challenge myself to remain unbiased when analyzing the available research and had to present the data without allowing my bias to construct the way in which it was displayed. I will confess that remaining unbiased was difficult for me at times during this research process. I have found myself looking at some of the contradictory data that did not indicate poor mental health and found myself questioning what may have led to these findings instead of accepting what the results have shown. Although I do know that it is important to be critical, I had to differentiate when I was being critical versus when I was just being biased which was the hardest struggle of this research process.

Implications for Social Work

Practice

In terms of social work practice, social work in Bangladesh is a fairly new field and this is identifiable as the Association of Social Workers, Bangladesh was only established in 1997 (IFSW, n.d.). Additionally, UNICEF has acknowledged the lack of social service workforce in

Bangladesh and has supported the investment in increasing this field particularly for children protection services which was expanded by 40% on March 14, 2024 (UNICEF, 2024; UNICEF, 2022). This study will create an opportunity to expand and continue to build on the social service workforce in Bangladesh by giving some direction on areas that need improvement and support such as student mental health. Especially as some of the findings indicate a lack of counselling services and prevalence of mental health stigma specifically emphasized by Urme and colleagues (2022). For social workers, looking at this research will allow for understanding the type of services that Bangladesh needs and encourages for an expansion of social work practice in general.

Policy

I believe that this scoping review can have an influence and provide some direction in regard to social work policy. This study overall shows that the post-secondary students in Bangladesh struggle with their mental health and some of the determinants or factors could possibly be diminished through a revision of policy. For example, one of the main mental health risk factors, identified in this study, included substance addiction. It may be possible to reduce the amount of students who struggle with substance addiction by requiring that they attend an educational workshop, or that universities are required to arrange one, dedicated to discuss substance addiction and provide resources. Another policy suggestion could be in regard to protecting students from bullying or nagging, which are identified as additional mental health factors within this study, and establishing consequences. In all, this study highlights many mental health factors that can be considered when revising policies to better protect the wellbeing of students.

Research

In regard to social work research, this scoping review compiles all of the existing literature in regard to the general mental health of post-secondary students in Bangladesh. What this means is that it is easier to identify dominant areas of research and where studies have already been conducted or with whom. This means that it is also easier to recognize areas of research that have not yet been explored or need further exploration. Social work research can then expand by looking into these research areas and may even uncover other risk factors not yet identified or different findings. This can aid in the development of social work services and understanding of the supports that students in Bangladesh need.

Limitations

Given the scope of this study and the timelines, there are multiple limitations to this research. With the first being the inclusion criteria of only including studies in English due to language barriers as I do not fluently speak or know how to read in Bangla. This is a critical limitation because it excludes any of the studies that are in Bangla which could have been significant since the criteria includes students living in Bangladesh and so it would make sense that some studies would be in that language.

Secondly, another limitation goes back to that inclusion criteria of just looking at students who reside in Bangladesh and not considering Bangladeshi students who live outside of Bangladesh. This was done with the hope of gathering unique and interconnected mental health factors. Although, by not studying Bangladeshi students outside of the country, data that may have strengthened or added onto the research has been sacrificed.

Thirdly, another limitation of this study is the fact that I am a sole researcher of this study which brings about multiple restrictions such as not being able to search a varying and multitude

of online databases when screening for selected studies. I have still searched four online databases, but with a team, this number could have been increased and more studies may have been found which would impact the findings of this scoping review. Another restriction is the inability to collaborate with another individual who could bring an extra layer of perspective and would have been able to add onto the critical piece of this study when analyzing the findings.

Lastly, this study excludes studies that focus the research on a specific determinant or external circumstance and include those that are exploring the general mental health of students without predetermining or studying a possible cause or correlation. This was an intentional exclusion in hopes of finding a variety of risk factors and avoiding determinants that may be predetermined as well as narrowing down the research topic. Although, from a different perspective, this decision can certainly be a limitation because it does exclude studies that highlight trends of mental health factors and important external factors that may specifically be significant to understand in the current state of the world (i.e. post COVID-19 pandemic).

Recommendations for Future Research

To begin with, one of the recommendations for future research would include to continue studying students of different disciplines to gain an understanding for whether there are any mental health trends in relation to those studying certain academic subjects and fields. For a point of reference, Hossain and colleagues (2019) found that studying in the social science faculty was a critical risk factor for depression. Although, when conducting the search for general mental health among post-secondary students in Bangladesh, there were no studies conducted on participants specifically studying within the social science faculty.

Another recommendation for future research would be looking into the possible cultural influences that may impact the mental health factors and determinants. As mentioned within the positionality and subjectivity section, I have some understanding of the cultural influences regarding mental health when it comes to the Bangladeshi community and I believe this is an important aspect to consider when conducting these studies. Even if the studies dedicated a small section to discuss the cultural influences, it would create more opportunities for research and add a critical piece to the data. Additionally, this can extend over to possibly discussing other macro-level influences including societal, religious, and political impacts.

The third recommendation is for future studies to diversify the study locations, study populations, and methods or methodologies. In terms of study locations, the selected studies of this scoping review have centered around research within cities. It would be important to expand research into rural and suburban areas of Bangladesh to determine the mental health trends that exist, or do not exist, there. Moreover, the selected studies focus on students who are all younger than the age of 32 years highlighting a huge gap of research missing from students aged older than 32 years. Researching older students may add to the research as there could be unique mental health factors and determinants that have not yet been identified which can further advocate for supports among this specific population. Lastly, a majority of studies employ a quantitative approach, specifically through a questionnaire or survey, which is effective in collecting mass data within a certain amount of time as well. Although, a suggestion for future research direction could involve more qualitative studies such as interviews. With mental health discussions being personal and complex, this can allow participants to discuss factors with more depth and details that may not be recognized through quantitative means.

Conclusion

In conclusion, this scoping review brings attention to the lack of research regarding the general mental health of post-secondary students living in Bangladesh. This review brings together all of the existing literature within this specific research topic and presents the findings which, from my knowledge, has not been done before. This is a critical contribution to the literature and addresses the knowledge gap while simultaneously highlighting this under-researched area creating pathways for future research and improvements for mental health supports.

The important findings of this scoping review include presenting what the literature has identified as prevalent mental health challenges among post-secondary students in Bangladesh as well as associated mental health factors and determinants. These mental health challenges include suicide, suicidal behaviours, depression, anxiety, stress, and struggling overall with mental health. With the most prevalent mental health challenge and research study focus being suicide and suicidal behaviours with depression being a close second. Additionally, the 10 common mental health factors and determinants included being a female, financial and economic condition, academic year of study, history of mental health both personal and familial, substance addiction, family, social media and screen time, academic performance, past negative experience, and romantic relationships. With the most prevalent risk factors shared amongst the selected studies including being a female, financial and economic condition, academic year of study, having a mental health history both personal and familial, and substance addiction.

A critical analysis of these important findings points to the limited research prioritization of the mental health among post-secondary students in Bangladesh prior to the COVID-19 pandemic. Other critical ideas ponder how the data would look different if it were situated

outside of cities, whether the data would garner different findings if it included students over the age of 32 years, and what the trends would show if there was a focus on studying students within certain fields of study or disciplines. Moreover, the research is lacking a critical lens by not involving examination of cultural, societal, religious, and political influences. Lastly, research around suicide among post-secondary students in Bangladesh finds that females are committing more which is a crucial distinction between the trend seen in Bangladesh versus Western societies.

Overall, the hope of this scoping review and its findings is that it can bring attention to the lack of mental health research in Bangladesh. More specifically, my aspiration for this study is that it will create an opportunity to expand research within this specific area regarding mental health among post-secondary students in Bangladesh. As well as guide and point to areas of improvement for social work practice, policy, and research that can help advocate for the mental health of students in Bangladesh and the lack of support. I believe building research within an area of need can assist with addressing problems and creating solutions which in this case would look like available, accessible, and increased mental health services and support for students. I will end off with this, my desire is that readers of this study walk away with a deepened understanding of the mental health challenges and factors faced by students in Bangladesh. To expand, my wish is that some of these readers are inspired or curious enough to expand upon this knowledge and possibly engage with ways that can improve the lives of these students or future students.

References

Al Jazeera. (2024, August 8). *Muhammad Yunus returns to Bangladesh to lead interim government*. https://www.aljazeera.com/news/2024/8/8/muhammad-yunus-returns-to-bangladesh-to-lead-interim-government

Amnesty International. (2024, August 2). *What is happening at the quota-reform protests in Bangladesh?*. https://www.amnesty.org/en/latest/news/2024/07/what-is-happening-at-the-quota-reform-protests-in-bangladesh/

Anwar, A., Yadav, U. N., Huda, M. N., Ghimire, S., Rahman, M., Ali, A. R. M. M., Mahumud, R. A., Shuvo, S. D., Nowar, A., Mondal, P. K., Rizwan, A. A. M., & Mistry, S. K. (2024). COVID-19-related stigma among older adults residing in the Rohingya refugee camps in Bangladesh. *Stigma and Health, 9*(4), 545. https://doi.org/10.1037/sah0000466

Antora, M., Islam, M. K., Sattar, A., & Sarker, M. F. H. (2024). Factors predicting the major depressive disorder of engineering students in bangladesh: A structural equation modeling approach. *Journal of Human Behavior in the Social Environment,* https://doi.org/10.1080/10911359.2024.2330461

Arafat, S. M. Y., Saleem, T., Menon, V., Ali, S. A., Baminiwatta, A., Kar, S. K., Akter, H., & Singh, R. (2022). Depression and suicidal behavior in South Asia: A systematic review and meta-analysis. *Global Mental Health, 9,* 181-192. https://doi.org/10.1017/gmh.2022.20

Amarasuriya, S. D., Jorm, A. F., & Reavley, N. J. (2018). Predicting intentions to seek help for depression among undergraduates in Sri Lanka. *BMC Psychiatry, 18*, 12. https://doi.org/10.1186/s12888-018-1700-4

Amarasuriya, S. D., Reavley, N. J., Rossetto, A., & Jorm, A. F. (2017). Helping intentions of undergraduates towards their depressed peers: A cross-sectional study in Sri Lanka. *BMC Psychiatry, 17*, 14. https://doi.org/10.1186/s12888-017-1192-7

Amarasuriya, S. D., Jorm, A. F., & Reavley, N. J. (2015a). Prevalence of depression and its correlates among undergraduates in Sri Lanka. *Asian Journal of Psychiatry, 15*, 32-37. https://doi.org/10.1016/j.ajp.2015.04.012

Amarasuriya, S. D., Jorm, A. F., Reavley, N. J., & Mackinnon, A. J. (2015b). Stigmatising attitudes of undergraduates towards their peers with depression: A cross-sectional study in Sri Lanka. *BMC Psychiatry, 15*, 13. https://ezproxy.library.yorku.ca/login?url=https://www.proquest.com/scholarly-journals/stigmatising-attitudes-undergraduates-towards/docview/1697764341/se-2

Amarasuriya, S. D., Jorm, A. F., & Reavley, N. J. (2015c). Quantifying and predicting depression literacy of undergraduates: A cross sectional study in Sri Lanka. *BMC Psychiatry, 15*, 13. https://ezproxy.library.yorku.ca/login?url=https://www.proquest.com/scholarly-journals/quantifying-predicting-depression-literacy/docview/1735931058/se-2

Aggarwal, N. K. (2012). Applying mobile technologies to mental health service delivery in South Asia. *Asian Journal of Psychiatry, 5*(3), 225-230. https://doi.org/10.1016/j.ajp.2011.12.009

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Banerjee, D., Javed, A., Rao, G. P., Saha, G., & Pradhan, S. N. (2022). The WPA-IPS-SPF-AFPA joint panel discussion organized by the IPA: Voices from South Asia regarding older people's mental health advocacy and services. *Consortium Psychiatricum, 3*(1), 92-97. https://doi.org/10.17816/CP147

Bhattacharjee, A., Taiabul Haque, S. M., Hady, M. A., Raihanul Alam, S. M., Rabbi, M., Kabir, M. A., & Ahmed, S. I. (2021). Understanding the social determinants of mental health of undergraduate students in bangladesh: Interview study. *JMIR Formative Research, 5*(11), e27114–e27114. https://doi.org/10.2196/27114

Bright, K. S., Norris, J. M., Letourneau, N. L., King Rosario, M., & Premji, S. S. (2018). Prenatal maternal anxiety in South Asia: A rapid best-fit framework synthesis. *Frontiers in Psychiatry, 9*, 12. https://doi.org/10.3389/fpsyt.2018.00467

Faruk, M. O., Khan, A. H., Chowdhury, K. U. A., Jahan, S., Sarker, D. C., Colucci, E., & Hasan, M. T. (2023). Mental illness stigma in Bangladesh: Findings from a cross-sectional survey. *Global Mental Health, 10*, 17. https://doi.org/10.1017/gmh.2023.56

Fotheringham, L., Paddick, S., Barron Millar, E., Norman, C., Lukose, A., Walker, R., & Varghese, M. (2021). Screening tools for common mental disorders in older adults in south asia: A systematic scoping review. *International Psychogeriatrics,* https://doi.org/10.1017/S1041610220003804

Faruk, M. O., Mamun, M. A., Siddique, A. B., & Griffiths, M. D. (2021). Risk factors for depression and anxiety disorders among bangladeshi dental students: A cross-sectional survey study. *International Journal of Mental Health and Addiction,* https://doi.org/10.1007/s11469-021-00603-1

Fernando, G. A. (2015). Attempting to bridge the 10/90 divide: special issue on South Asian mental health. *International Review of Psychiatry (Abingdon, England)*, *27*(3), 176–179. https://doi.org/10.3109/09540261.2015.1065079

Ghani, F., & Bano, S. (2024). Qualitative exploration of experiences of mental illness and stigma management strategies among university students in lahore. *Journal of Constructivist Psychology,* https://doi.org/10.1080/10720537.2024.2412854

Ghafari, R., Mirghafourvand, M., Rouhi, M., & Osouli Tabrizi, S. (2021). Mental health and its relationship with social support in Iranian students during the COVID-19 pandemic. *BMC Psychology, 9*, 8. https://doi.org/10.1186/s40359-021-00589-4

Giasuddin, N. A., Levav, I., & Gal, G. (2015). Mental health stigma and attitudes to psychiatry among Bangladeshi medical students. *International Journal of Social Psychiatry, 61*(2), 137-147. https://doi.org/10.1177/0020764014537237

Hossen, M. T., Shuvo, S. D., Mazumdar, S., Hossain, M. S., Riazuddin, M., Roy, D., Mondal, B. K., Parvin, R., Paul, D. K., & Adnan, M. M. (2024). Determinants of anxiety and depression among type 2 diabetes mellitus patients: A hospital-based study in Bangladesh amid the COVID-19 pandemic. *Global Mental Health, 11*, 11. https://doi.org/10.1017/gmh.2024.8

Hussain, R., & Shova, T. Y. (2024). The Increasing Suicide Rate of University Students in Bangladesh: A Sociological Investigation. *ASR: Chiang Mai University Journal of Social Sciences and Humanities*, *11*(1). https://doi.org/10.12982/CMUJASR.2024.001

Hossain, Md. M., Alam, Md. A., & Masum, M. H. (2022). Prevalence of anxiety, depression, and stress among students of Jahangirnagar University in Bangladesh. *Health Science Reports*, *5*(2), e559-n/a. https://doi.org/10.1002/hsr2.559

Hashmi, N., Ullah, I., Tariq, S. R., de Filippis, R., Orsolini, L., da Costa, M. P., Virani, S., & Pereira-Sanchez, V. (2022). How is the COVID-19 pandemic affecting women's menstrual cycles and quality of life? A view from South Asia. *BJPsych Advances*, *28*(4), 274-277. https://doi.org/10.1192/bja.2021.64

Hossain, M. M., Purohit, N., Sultana, A., Ma, P., McKyer, E. L., & Ahmed, H. U. (2020). Prevalence of mental disorders in South Asia: An umbrella review of systematic reviews and meta-analyses. *Asian Journal of Psychiatry, 51*, 13. https://doi.org/10.1016/j.ajp.2020.102041

Hossain, S., Anjum, A., Uddin, M. E., Rahman, M. A., & Hossain, M. F. (2019). Impacts of socio-cultural environment and lifestyle factors on the psychological health of university students in Bangladesh: A longitudinal study. *Journal of Affective Disorders, 256,* 393-403. https://doi.org/10.1016/j.jad.2019.06.001

Hasan, M. T., & Thornicroft, G. (2018). Mass media campaigns to reduce mental health stigma in Bangladesh. *The Lancet Psychiatry, 5*(8), 616. https://doi.org/10.1016/S2215-0366(18)30219-0

IFSW. (n.d.). *Association of Social Workers (ASW), Bangladesh*. International Federation of Social Workers. https://www.ifsw.org/member-organisation/bangladesh/

Independent Digital News and Media. (2024, August 5). *Anti-government protesters in Bangladesh plan to March to Capital after a weekend of deadly clashes*. The Independent. https://www.independent.co.uk/news/sheikh-hasina-ap-bangladesh-dhaka-bangladesh-nationalist-party-b2591167.html

Islam, M. J. (2024). The relationship between childhood abuse and unintended pregnancy among married women of reproductive age in Bangladesh. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 33*(2), 243-261. https://doi.org/10.1080/10538712.2024.2314283

Insan, N., Weke, A., Forrest, S., & Rankin, J. (2022). Social determinants of antenatal depression and anxiety among women in South Asia: A systematic review & meta-analysis. *PLoS ONE, 17*(2), 25. https://doi.org/10.1371/journal.pone.0263760

Islam, S., Akter, R., Sikder, T., & Griffiths, M. D. (2022). Prevalence and factors associated with depression and anxiety among first-year university students in Bangladesh: A cross-sectional study. *International Journal of Mental Health and Addiction, 20*(3), 1289-1302. https://doi.org/10.1007/s11469-020-00242-y

Islam, M. R. (2021). The COVID-19 pandemic and suicidal behavior in Bangladesh: Social stigma and discrimination are key areas to focus on. *Alpha Psychiatry, 22*(5), 275-276. https://doi.org/10.5152/alphapsychiatry.2021.21498

Jain, T., Ranjan, R., Chaudhary, N., Kumar, P., & Ahmad, S. (2021). Effect on mental health among undergraduate college students of India during the COVID-19 pandemic: A cross-sectional multicentric study. *Psychiatria Danubina, 33*, 392-398. https://ezproxy.library.yorku.ca/login?url=https://www.proquest.com/scholarly-journals/effect-on-mental-health-among-undergraduate/docview/2807990752/se-2

Jordans, M. J. D., Kaufman, A., Brenman, N. F., Adhikari, R. P., Luitel, N. P., Tol, W. A., & Komproe, I. (2014). Suicide in South Asia: A scoping review. *BMC Psychiatry, 14*, 9. https://doi.org/10.1186/s12888-014-0358-9

Kamruzzaman, M., Hossain, A., Islam, Md. A., Ahmed, Md. S., Kabir, E., & Khan, Md. N. (2024). Exploring the prevalence of depression, anxiety, and stress among university students in Bangladesh and their determinants. *Clinical Epidemiology and Global Health, 28*, 101677-. https://doi.org/10.1016/j.cegh.2024.101677

Koly, K. N., Saba, J., Rao, M., Rasheed, S., Reidpath, D. D., Armstrong, S., & Gnani, S. (2024). Stakeholder perspectives of mental healthcare services in Bangladesh, its challenges and opportunities: A qualitative study. *Global Mental Health, 11*, 12. https://doi.org/10.1017/gmh.2024.30

Khoso, A. B., Noureen, A., Un Nisa, Z., Hodkinson, A., Elahi, A., Arshad, U., Naz, A., Bhatti, M. M., Asif, M., Husain, M. O., Husain, M. I., Chaudhry, N., Husain, N., Chaudhry, I. B., & Panagioti, M. (2023). Prevalence of suicidal ideation and suicide attempts in individuals with psychosis and bipolar disorder in South Asia: Systematic review and meta-analysis. *BJPsych Open, 9*, 13. https://doi.org/10.1192/bjo.2023.570

Koly, K. N., Saba, J., Billah, M. A., McGirr, A., Sarker, T., Haque, M., Mustary, E., Hanifi, S. M. M., & Begum, F. (2023). Depressive symptoms and anxiety among women with a history of abortion living in urban slums of Bangladesh. *BMC Psychology, 11*(1), 10. https://doi.org/10.1186/s40359-023-01224-0

Koly, K. N., Tasnim, Z., Ahmed, S., Saba, J., Mahmood, R., Farin, F. T., Choudhury, S., Ashraf, M. N., Hasan, M. T., Oloniniyi, I., Modasser, R. B., & Reidpath, D. D. (2022). Mental healthcare-seeking behavior of women in Bangladesh: Content analysis of a social media platform. *BMC Psychiatry, 22*, 12. https://doi.org/10.1186/s12888-022-04414-z

Kabir, R., Isha, S. N., Chowdhury, M. T. H., Siddika, N., Jahan, S. S., Saha, A. K., Nath, S. K., Jahan, M. S., Sivasubramanian, M., Mahmud, I., & Apu, E. H. (2021). Depression among the non-native international undergraduate students studying dentistry in Bangladesh. *International Journal of Environmental Research and Public Health*, *18*(11), 5802-. https://doi.org/10.3390/ijerph18115802

Koly, K. N., Sultana, S., Iqbal, A., Dunn, J. A., Ryan, G., & Chowdhury, A. B. (2021). Prevalence of depression and its correlates among public university students in Bangladesh. *Journal of Affective Disorders, 282*, 689-694. https://doi.org/10.1016/j.jad.2020.12.137

Kar, S. K., Singh, A., Garg, K., & Gupta, B. (2019). Source of information about mental illness among medical students in a tertiary care centre of North India. *Asian Journal of Psychiatry, 39*, 101-103. https://doi.org/10.1016/j.ajp.2018.12.013

Maji, S., Chaturmohta, A., Deevela, D., Sinha, S., Tarsolia, S., & Barsaiya, A. (2024). Mental health consequences of academic stress, amotivation, and coaching experience: A study of India's top engineering undergraduates. *Psychology in the Schools, 61*(9), 3540. https://doi.org/10.1002/pits.23230

Mahmoodi, S. M. H., Ahmadzad-Asl, M., Eslami, M., Abdi, M., Hosseini Kahnamoui, Y., & Rasoulian, M. (2022). Mental health literacy and mental health information-seeking behavior in Iranian University students. *Frontiers in Psychiatry, 13*, 893534. https://doi.org/10.3389/fpsyt.2022.893534

Mamun, M. A., Rayhan, I., Akter, K., & Griffiths, M. D. (2022a). Prevalence and predisposing factors of suicidal ideation among the university students in Bangladesh: A single-site survey. *International Journal of Mental Health and Addiction, 20*(4), 1958. https://doi.org/10.1007/s11469-020-00403-z

Mamun, M. A., Hossain, M. S., & Griffiths, M. D. (2022b). Mental health problems and associated predictors among Bangladeshi students. *International Journal of Mental Health and Addiction, 20*(2), 657-671. https://doi.org/10.1007/s11469-019-00144-8

Mamun, M. A., Misti, J. M., & Griffiths, M. D. (2020). Suicide of Bangladeshi medical students: Risk factor trends based on Bangladeshi press reports. *Asian Journal of Psychiatry, 48*, 3. https://doi.org/10.1016/j.ajp.2019.101905

Mufarrih, S. H., Naseer, A., Qureshi, N. Q., Anwar, Z., Zahid, N., Lakdawala, R. H., & Noordin, S. (2019). Burnout, job dissatisfaction, and mental health outcomes among medical students and health care professionals at a tertiary care hospital in Pakistan: Protocol for a multi-center cross-sectional study. *Frontiers in Psychology, 10*, 6. https://doi.org/10.3389/fpsyg.2019.02552

Murshid, N. S. (2017). Parents, friends, and depression: A multi-country study of adolescents in South Asia. *Children and Youth Services Review, 79*, 160-165. https://doi.org/10.1016/j.childyouth.2017.06.018

Moshki, M., Amiri, M., & Khosravan, S. (2012). Mental health promotion of Iranian university students: The effect of self-esteem and health locus of control. *Journal of Psychiatric and Mental Health Nursing, 19*(8), 715-721. https://doi.org/10.1111/j.1365-2850.2011.01806.x

Neuman, W.L. & Kreuger, L. (2003). The meanings of methodology. In W. L. Neuman & L. Kreuger (Eds.), *Social work research methods: Qualitative and quantitative approaches* (pp. 70-96). Allyn and Bacon.

Ovi, M. R., Siddique, M. A. B., Ahammed, T., Chowdhury, M. A. B., & Uddin, M. J. (2024). Assessment of mental wellbeing of university students in Bangladesh using Goldberg's GHQ-12: A cross-sectional study. *Health Science Reports, 7*(3), e1948-n/a. https://doi.org/10.1002/hsr2.1948

Reuters. (2024, August 29). *More than 1,000 killed in Bangladesh violence since July, Health Ministry chief says.* https://www.reuters.com/world/asia-pacific/more-than-1000-killed-bangladesh-violence-since-july-health-ministry-chief-says-2024-08-29/

Roy, N., Amin, M. B., Mamun, M. A., Sarker, B., Hossain, E., & Aktarujjaman, M. (2023). Prevalence and factors associated with depression, anxiety, and stress among people with disabilities during COVID-19 pandemic in Bangladesh: A cross-sectional study. *PLoS ONE, 18*(7), 14. https://doi.org/10.1371/journal.pone.0288322

Rasheduzzaman, M., al-Mamun, F., Hosen, I., Akter, T., Hossain, M., Griffiths, M. D., & Mamun, M. A. (2022). Suicidal behaviors among Bangladeshi university students: Prevalence and risk factors. *PLoS ONE, 17*(1), 17. https://doi.org/10.1371/journal.pone.0262006

Rahman, M. E., Islam, M. S., Mamun, M. A., Moonajilin, M. S., & Yi, S. (2022). Prevalence and factors associated with suicidal ideation among university students in Bangladesh. *Archives of Suicide Research, 26*(2), 975-984. https://doi.org/10.1080/13811118.2020.1833800

Rasheduzzaman, M., al Mamun, F., Faruk, M. O., Hosen, I., & Mamun, M. A. (2021). Depression in Bangladeshi university students: The role of sociodemographic, personal, and familial psychopathological factors. *Perspectives in Psychiatric Care, 57*(4), 1585-1594. https://doi.org/10.1111/ppc.12722

Sultana, S., Muhammad, F., Chowdhury, A. B. M. A., & Mistry, S. K. (2024). Child-related factors associated with depressive symptoms among mothers of school-going children in urban Bangladesh: A cross-sectional study. *PLoS ONE, 19*(5), 12. https://doi.org/10.1371/journal.pone.0304480

Shahjahan, M., Islam, M. M., Islam, M., Das, K. P., & Sabbir, A. A. (2023). Urban insights into mental health: A study of depression and anxiety factors among urban adults of bangladesh in the covid-19 pandemic. *Journal of Human Behavior in the Social Environment,* https://doi.org/10.1080/10911359.2023.2282695

Sayeed, A., Rahman, M. H., Hassan, M. N., deSteiguer, A., Kundu, S., Meem, A. E., Hasan, A., Mallick, T., Sultana, M. S., Hasanuzzaman, M., Sahrin, S., & Hasan, M. T. (2023). Prevalence and associated factors of depression among Bangladeshi university students: A cross-sectional study. *Journal of American College Health, 71*(5), 1381. https://doi.org/10.1080/07448481.2021.1944168

Saeed, R., Amin, F., Talha, M., Randenikumara, S., Shariff, I., Durrani, N., & Salman, S. (2021). COVID-19 pandemic prevalence and risk factors for depression among health care workers in South Asia. *Asia-Pacific Journal of Public Health, 33*(8), 935-939. https://doi.org/10.1177/10105395211002324

Saeed, H., Saleem, Z., Ashraf, M., Razzaq, N., Akhtar, K., Maryam, A., Abbas, N., Akhtar, A., Fatima, N., Khan, K., & Rasool, F. (2018). Determinants of anxiety and depression among university students of Lahore. *International Journal of Mental Health and Addiction, 16*(5), 1283-1298. https://doi.org/10.1007/s11469-017-9859-3

Sharma, M., & Razzaque, B. (2017). Research capacity strengthening in South Asia: Based on the experience of South Asian Hub for Advocacy, Research and Education on Mental Health (SHARE). *Global Mental Health, 4*, 10. https://doi.org/10.1017/gmh.2017.5

Singla, D., Lazarus, A., Atif, N., Sikander, S., Bhatia, U., Ahmad, I., Nisar, A., Khan, S., Fuhr, D., Patel, V., & Rahman, A. (2014). “Someone like us”: Delivering maternal mental health through peers in two South Asian contexts. *Journal of Affective Disorders, 168*, 452-458. https://doi.org/10.1016/j.jad.2014.07.017

Storrie, K., Ahern, K., & Tuckett, A. (2010). A systematic review: Students with mental health problems-A growing problem. *International Journal of Nursing Practice*, *16*(1), 1–6. https://doi.org/10.1111/j.1440-172X.2009.01813.x

Shoukat, S., Anis, M., Kella, D. K., Qazi, F., Samad, F., Mir, F., Mansoor, M., Parvez, M. B., Osmani, B., Panju, S. A., & Naqvi, H. (2010). Prevalence of mistreatment or belittlement among medical students—A cross sectional survey at a private medical school in Karachi, Pakistan. *PLoS ONE*, *5*(10), 6. https://doi.org/10.1371/journal.pone.0013429

Tanha, A. F., Sheba, N. H., Islam, M. S., Potenza, M. N., & Islam, M. R. (2022). A review of common mental health problems in the general population during the covid-19 pandemic in south asia. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues,* https://doi.org/10.1007/s12144-022-04106-7

Teo, I., Ozdemir, S., Malhotra, C., Yang, G. M., Ocampo, R. R., Bhatnagar, S., Hapuarachchi, T., Joad, A. K., Mariam, L., Palat, G., Rahman, R., & Finkelstein, E. A. (2021). High anxiety and depression scores and mental health service use among South Asian advanced cancer patients: A multi-country study. *Journal of Pain and Symptom Management, 62*(5), 997-1007. https://doi.org/10.1016/j.jpainsymman.2021.04.005

Trgovac, A. B., Kedron, P. J., & Bagchi-Sen, S. (2015). Geographic variation in male suicide rates in the United States. *Applied Geography (Sevenoaks)*, *62*, 201–209. https://doi.org/10.1016/j.apgeog.2015.04.005

Trivedi, J. K., Mishra, M., & Kendurkar, A. (2007). Depression among women in the South-Asian region: The underlying issues. *Journal of Affective Disorders, 102*(1-3), 219-225. https://doi.org/10.1016/j.jad.2006.09.024

UNICEF. (2024). *The government expands social service workforce by 40 per cent, supported by UNICEF, to strengthen child protection services in Bangladesh*. https://www.unicef.org/bangladesh/en/press-releases/government-expands-social-service-workforce-40-cent-supported-unicef-strengthen#:~:text=DHAKA%2C%2014%20March%202024%20%2D%20The,and%20families%20across%20the%20nation.

Urme, S. A., Islam, Md. S., Begum, H., & Awal Chowdhury, N. M. R. (2022). Risk factors of suicide among public university students of Bangladesh: A qualitative exploration. *Heliyon*, *8*(6), e09659–e09659. https://doi.org/10.1016/j.heliyon.2022.e09659

UNICEF. (2022). *Investing in the social service workforce crucial for the protection of millions of children in Bangladesh*. https://www.unicef.org/bangladesh/en/press-releases/investing-social-service-workforce-crucial-protection-millions-children-bangladesh

Ullah, I., Jatchavala, C., Waheed, S., Shoib, S., & Őri, D. (2021). Suicide in low- and middle-income countries: Perspectives form overview of studies in South Asia. *Asian Journal of Psychiatry, 61*, 2. https://doi.org/10.1016/j.ajp.2021.102715

Vidyasagaran, A. L., McDaid, D., Faisal, M. R., Nasir, M., Muliyala, K. P., Thekkumkara, S., Wright, J., Huque, R., Benkalkar, S., & Siddiqi, N. (2023). Prevalence of mental disorders in South Asia: A systematic review of reviews. *Global Mental Health, 10*, 19. https://doi.org/10.1017/gmh.2023.72

Verma, K. (2020). The mental health impact of the COVID-19 epidemic on college students in India. *Asian Journal of Psychiatry*, *53*, 2. https://doi.org/10.1016/j.ajp.2020.102398

Willmot, R. A., Sharp, R. A., Amir Kassim, A., & Parkinson, J. A. (2023). A scoping review of community-based mental health intervention for children and adolescents in South Asia. *Global Mental Health, 10*, 18. https://doi.org/10.1017/gmh.2022.49

Wahid, M. H., Sethi, M. R., Shaheen, N., Javed, K., Qazi, I. A., Osama, M., Ilah, A., & Firdos, T. (2023). Effect of academic stress, educational environment on academic performance & quality of life of medical & dental students; gauging the understanding of health care professionals on factors affecting stress: A mixed method study. *PLoS ONE*, *18*(11), 14. https://doi.org/10.1371/journal.pone.0290839

Wasil, A. R., Malhotra, T., Nandakumar, N., Tuteja, N., DeRubeis, R. J., Stewart, R. E., & Bhatia, A. (2022). Improving mental health on college campuses: Perspectives of Indian college students. *Behavior Therapy*, *53*(2), 348-364. https://doi.org/10.1016/j.beth.2021.09.004

Zaid, Z. I., Tasnim, A., Khan, M. M. H., Ratan, Z. A., Islam, M. T., & Haque, M. A. (2024). Common mental health problems and associated factors among recovered COVID-19 patients in rural area: A community-based survey in Bangladesh. *PLoS ONE, 19*(4), 12. https://doi.org/10.1371/journal.pone.0294495

Zavala, G. A., Haidar-Chowdhury, A., Prasad-Muliyala, K., Appuhamy, K., Aslam, F., Huque, R., Khalid, H., Murthy, P., Nizami, A. T., Rajan, S., Shiers, D., Siddiqi, N., Siddiqi, K., & Boehnke, J. R. (2023a). Prevalence of physical health conditions and health risk behaviours in people with severe mental illness in South Asia: Multi-country cross-sectional survey. *BJPsych Open, 9,* 13. https://doi.org/10.1192/bjo.2023.12

Zavala, G. A., Jennings, H. M., Afaq, S., Alam, A., Ahmed, N., Aslam, F., Arsh, A., Coales, K., Ekers, D., Nabi, M., Naz, A., Shakur, N., Siddiqi, N., Wright, J. M., & Kellar, I. (2023b). Effectiveness and implementation of psychological interventions for depression in people with non-communicable diseases in South Asia: Systematic review and meta-analysis. *International Journal of Mental Health*, *52*(3), 260-284. https://doi.org/10.1080/00207411.2023.2202431

Appendix

Table 1. Full List of Selected Articles and Synthesis of Results (N = 19).

Author(s), Year of Publication and Study Location	Aims of the Study	Sample Size and Study Population	Methodology/ Method(s)	Key Results
1. Antora et al. (2024) Across Bangladesh: -Public (n=6) and private (n=8) universities	-To study factors affecting Major Depressive Disorder (MDD) among engineering students -To explore the pathways that may explain how the found factors contribute to MDD	-(n=803) -Engineering students from public and private universities -78.46% male and 21.54% female -Aged between 18 and 25 years with an average age of 21.92 - 60.4% were from urban areas, 30% were from sub-urban areas, and 9.6% were from rural areas -75.6% of the participants came from middle-class families, 18.8% came from lower-class families, and 5.5% were from upper-class families -51.8% of the participants lived with friends, 32.9% lived with their parents, and 15.3% lived alone	-Cross-sectional study: questionnaire -First part asks demographic questions and second is related to MDD factors -Patient Health Questionnaire-9 (PHQ-9) was used to assess MDD -Data collected in-person and online -Study was conducted from September 5, 2022 to November 10, 2022	-Most predicting determinants for MDD= Past negative experience and unhealthy lifestyle -Educational issue, social media addiction, and personal relationship issue are found to be less predicting determinants but are still positively related to MDD -Family support and bonding was found to be negatively correlated with MDD indicating that strong family relationships are important for providing support and contributing to wellbeing
2. Bhattacharjee et al. (2021) Major cities in Bangladesh: -7 universities	-To label the broader social determinants of mental health among students -To study how these factors exist in daily lives and whether self-	-(n=38) -Undergraduate students -Aged between 19 and 27 years -30 participants were traditional students which means that they went into university immediately after their high school diploma -8 participants were non-traditional which means they received 2 to 3 years of technical vocational training before entering university	-21-day study: participants used app (named How Was the Call?) to self-report and monitor mood -App purpose: to help identify social relationships and factors that affect mental health -Semistructured interview: before	-From most discussed theme to least: academic performance, family, job and economic condition, religion, and romantic relationships were all social determinants of mental health

	monitoring tools are effective factors		and after study (dates not provided) -Thematic data analysis: Boyatzis framework	
3. Faruk et al. (2021) Across Bangladesh: -1 public dental college and 4 higher education organizations that have dental units	-To evaluate the mental health problems among dental students specifically depression and anxiety along with covariates	-(n=468) -Dental students -76.3% female -88.5% Muslim -87.8% belonged to a nuclear family -95.7% did not smoke and 97.9% were non-psychoactive substance users -12.8% suffered from past-year physical illness and 11.3% faced past-year mental disorders -40.2% experienced past-year post-traumatic events, 16.5% reported family history of mental illness, 3.8% had ~1 family suicide, and 6% had a family history of suicide attempts -12.4%, 2.6% and 1.1% had past-month suicidal ideation, suicidal plans, and suicide attempt	-Cross-sectional study: survey -Included Patient Health Questionnaire, Generalized Anxiety Disorder scale, and questions regarding sociodemographic factors, personal suffering, and family mental health history -Study was conducted from August, 2019 to October, 2019	-Prevalence rates for moderate to severe depression were 27.4% and 18.2% for anxiety -Factors for both depression and anxiety: being raised in a city area, past-year mental illness, past-year post-traumatic events, family history of mental illness/suicide attempts/completed suicides, past-month suicidal ideation/suicide plans/suicide attempt -Risk factor for depression: being a female (29.7% females depressed in comparison to 19.8% males) -Risk factors for anxiety: belonging to a lower or middle class family and past-year physical illness -Past-year physical illness was highly associated with anxiety and not significantly associated with depression
4. Hussain & Shova (2024) Across Bangladesh: -75 cases from public universities, 7 cases from private universities, and 22 cases from medical colleges	-To critically analyze both patterns and causes of suicide among tertiary students	-(n=104) -Tertiary-level students studying in Bangladesh (students studying at the graduate and post-graduate levels)	-Secondary information used for a widespread review of the literature (sources include journals, newspapers, books, and research papers) -Theoretical orientation follows: Emile Durkheim's Suicide: A Study in Sociology	-Suicide cases and the years they happened in public institutes: Dhaka University had 30 cases (2005-2020), Chittagong University had 12 cases (2008-2020), Rajshahi University had 13 cases (2008-2012), Shahjalal University of Science and Technology had 7 cases (2012-2020), and Jahangirnagar University had 5 cases (2010-2011) -Public universities with two cases: Kazi Nazrul Islam University (2012), Patuakhali Science and Technology University (2009-2010), and Kushtia Islamic University (2018-2020) -Public universities with one case: Bangladesh Agricultural University (2009) and Khulna University (2009)

			(1952) and Immanuel Kant's Fundamental Principles of the Metaphysics of Morals (1949) -Study looked at suicide cases from the year 2005 to 2022	-7 suicide cases in private universities (2011-2020) and 22 cases in medical colleges (2010-2018) -Suicide reasons: failure of love, family crisis and poverty, psychological pressure from class mates/peers, social expectations, academic pressure, poor academic performance (exams), life frustration, long-term unemployment, loneliness, less counselling opportunities, poor socialization, dependency on virtual relationship/technology/ and less demand on social relations, crisis of moral education and degradation of morality/ethics, social inequality, depression, addiction, low self-confidence and identity crisis
5. Hossain et al. (2022) Dhaka, Bangladesh: -Jahangirnagar University	-To identify levels of anxiety, depression, and stress within university students -To look at the associated socio-demographic factors	-(n=351) -University students -Aged 18-28 years, average age of 21 -61% male -85.2% staying at residential Hall/mess -About half are second child of parents -70% do not smoke -70% reported good health, 4% reported sickness, and more than 60% did not physically exercise regularly -More than 60% are from rural areas and from nuclear families -More than half continue their studies by their own choice and more than 20% admit that their course choice was forced by their parents -About 40% had academic pressure -Average sleeping= above 8 hours daily -Maximum study hour in a week was 60 hours while the average was more than 18 hours -Average monthly family income was 31,000 Taka	-Self-administered questionnaire asking about sociodemographic information and used the Depression, Anxiety and Stress Scale-21 Items (DASS-21) -Study was conducted from December 8, 2019 to January 23, 2020	-No students had extremely severe stress levels but 45% report having moderate to severe levels of stress -5% had severe stress levels -More than 40% had extremely severe anxiety levels -1 out of 4 had moderate or severe anxiety levels -7% had extremely severe levels of depression and more than half had moderate levels of depression -Females reported more stress than males by 10% and students from rural areas have higher levels than those from urban areas by 5% -Factors for anxiety: residence, more than half of the females reported extremely severe levels and about 35% of males reported extremely severe level, and those from nuclear families had more extremely severe levels in comparison to those from joint families -Factors for depression: students who live in a hall/mess have more depression than those living at home with family and students who are the first child of their parents
6. Hossain et al. (2019)	-To explore socio-cultural environment	-(n=1140) -Undergraduate students -58% male -Aged from 18-22 years	-Longitudinal study: 15-month observational follow-up study	-588 had provisional depressive disorder from the baseline survey, this number was 665 for the follow-up survey with 27.3% reporting mild, 25% reporting

Dhaka, Bangladesh: -Jahangirnagar University	and lifestyles impacts on the psycho-logical health of university students (with a focus on depression and anxiety)	-One third are the first child of their parents -Parent's occupation for fathers of the participants: 17.6% are employed as advocate/banker/doctor/engineer/teacher, 27% are businessperson, 17.1% are driver/farmer/labour, 27.6% are other, and 10.6% are no job or not applicable - Parent's occupation for mothers of the participants: 82.1% are homemaker, 9.9% are advocate/banker/doctor/teacher, 4.4% are other services, and 3.6% are no job or not applicable	after a baseline survey was conducted in 2016 -Data collected by a pre-developed questionnaire asking about sociodemographic, comprehensive lifestyles, and psychological health information including the Patient Health Questionnaire-9 (PHQ-9) and GAD-7 -Baseline survey was conducted between April 10, 2016 and July 28, 2016 -Follow-up survey was conducted between August 20, 2017 and November 30, 2017	moderate, 15.8% reporting moderately severe, and 6% reporting severely severe rates -Follow-up survey: PHQ-9 confirmed 74.1% prevalence of provisional depression (males were 71.5% and females were 77.4%) -Follow-up survey: prevalence of provisional anxiety is 61.9% (males were 60.4% and females were 63.7% which is about 27.1% increase from baseline survey) -Follow-up survey: 555 were found to have provisional anxiety disorder, of this, 28.5% reported mild, 22.1% reported moderate, and 11.3% severe -Baseline survey: 69.3% reported experiencing tension (males were 71.4% and females were 66.4%) -Follow-up survey: 68.3% experiencing tension (males were 67.7% and females were 69.2%) -Students reported psychological causes for tension increased from 12.7% to 20.3% when comparing the baseline survey to the follow-up survey -Tension due to multiple causes was reported within the follow-up survey including university culture, study and career, psychological, familial, and others -Critical risk factors for depression and anxiety: female, dissatisfaction with current education, financial condition and future career, dissatisfaction with university culture, high and excessive recreational screen time, dissatisfaction with daily sleep, alcohol consumption, and stress -Additional critical risk factors for depression: students of social sciences faculty, weekly physical inactivity, long sleep duration, and anxiety -Additional critical risk factors for anxiety: short sleep duration, low and high daily meal intake frequency, and depression
7. Islam et al. (2022) Dhaka, Bangladesh: -Jahangirnagar University	-To investigate mental health issues, particularly depression	-(n=400) -First-year university students -Aged between 18-23 and living on campus -52.3% males and 47.8% females -40.3% came from lower-class families -59.9% came from a rural area	-Cross-sectional survey examining sociodemographic and behavioural variables including the Patient Depression	-Prevalence rate for moderate to extremely severe levels of depression was 69.5% and 61% for anxiety (there were no significant gender differences) -Depression rates: 9.5% was minimal, 11% was mild, 50.2% was moderate, 15.3% was moderately severe, and 4% was severe

	and anxiety, among university students who live on campus and are in their first year of studies	-55.5% did not have regular physical exercise -71% were less than normal sleepers and 56.5% were satisfied with their sleep	Questionnaire (PHQ-9) and Generalized Anxiety Disorder Assessment (GAD-7) -Study was conducted from August, 2019 to October, 2019	-Anxiety rates: 18% was minimal, 21% was mild, 47.3% was moderate, and 13.8% was severe -Depressed participants were significantly more likely to have unsatisfactory sleep quality and anxiety -Anxious participants were significantly more likely to not exercise and have unsatisfactory sleep quality -Associations found in the study: students with unsatisfactory sleep quality were 2.94 times more likely to be depressed, students not engaging in physical exercise were 1.72 times more likely to have anxiety, students using internet less than 2 hours daily were 0.53 times less likely than students who use internet more than 4 hours daily to be depressed, students using internet 2-4 hours daily were 0.56 times less likely than students using the internet more than 4 hours daily to be depressed, and depressed students were 9.62 times more likely to have anxiety
8. Kamruzzaman et al. (2024) Rajshahi division (Northern Region), Bangladesh: -Two universities: Rajshahi University (RU) and Varendra University (VU)	-To explore depression, anxiety, and stress prevalence among university students along with identified factors	-(n=738) -380 students were selected from Rajshahi University and 358 were selected from Varendra University -44% were affiliated with arts and social science discipline -58% were aged between 21 and 23 -67.21% male -39% noted paternal occupation to be business -57% came from a nuclear family	-Cross-sectional study: two-part questionnaire -First part pertaining to gathering sociodemographic information -Second part was the Depression, Anxiety, and Stress Scale (DASS-42) formulated by Lovibond -Study was conducted from January 1, 2021 to March 20, 2021	-57.45% did not suffer from depression, 29% were not struggling with anxiety, and 74.39% did not experience stress -Depression rates: about 57% had normal levels, 28% had moderate levels, and 15% had severe depression -One-third had symptoms indicative of an anxiety syndrome -25% had signs of a stress syndrome and 75% had normal stress -Strong correlation was revealed between Depression and Anxiety scores, Depression and Stress scores, and Anxiety and Stress scores -Identified depression factors: aged 24 years or older, females, unmarried, those with fathers in service or other occupations, higher parental income, and being from a private university -Identified anxiety factors: 24 years or older followed by those aged 21-23, females, unmarried, underweight, and studying in private universities -Identified stress factors: aged 21-23 years, unmarried, females, and belonging to families with 4 or fewer numbers

				-Moderate levels of depression were 32% lower among those from an extended family versus those from nuclear families -Likelihood of moderate stress levels was 35% lower among those from an extended versus nuclear family -Those from the business faculty were 2.28 times more likely to experience stress versus those from the science and engineering faculty -Single students, versus married students, were 2.50 times more likely to experience severe anxiety levels
9. Kabir et al. (2021) Across Bangladesh: -Nine public and private dental colleges	-To evaluate depression status among international students studying dentistry in Bangladesh	-(n=200) -International undergraduate dental students -78.5% female and 21.5% male -79.5% were below the age of 24 years old (median age was 23.22 year) -Student ages ranged from 18-32 years old	-Cross-sectional study: three-part web-based survey -Three parts: background information, challenges faced, and a depression measurement -The Centre for Epidemiological Studies Depression Scale (CES-D-10) was used for the depression assessment -Study was conducted from October, 2020 to December, 2020	-Participants who suffered from depression: 51.2% of participants, 52.2% of females, 63% of those who struggled with their studies, 69.2% of those who experienced poor academic teacher interactions, those living with others had a rate of 78.6%, 65.5% of participants who also had health problems, 77.3% of participants who also had financial difficulty, 79.7% of participants who also had problems with living conditions, 65.5% of participants who also struggled with transport facility, 53.1% of students from religious groups (excluding Muslim), third year dental students (61.1% of students), about 60% of those who cannot speak Bengali well, -Findings/factors relating to depression: poor cooperation was linked to depression suffering, those living with friends did not suffer with depression versus those who were living alone and reported rate of 75%, 70.2% had challenges adapting to local food and experienced depression, 80.5% had depression due to homesickness -Significant depression factors: homesickness, health problems, financial difficulty, living conditions, adapting to local food, accommodation, transport -Depression correlations: those who struggled with the local language were 2.28 times more likely, homesick students were 2.75 times more likely versus those who are not, those with health problems were 3.57 times more likely than those without and those who are struggling with financial difficulties were 2.62 times more likely than those who were not

10. Koly et al. (2021) Urban and Suburban areas of Bangladesh: -Two public universities: University of Dhaka (urban area) and University of Rajshahi (suburban area)	-To explore and assess prevalence of depression among university students with a diverse sample selection	-(n=400): 200 from each university -Undergraduate/postgraduate students -45% male and mean age was 22 years -60.8% stayed at the hostel/hall and 13.4% lived with their families -Average household size was 5 -57% financially independent (living expenses) while 74% depended on family income (educational expenses) -~50% from middle to higher class -46% have fathers that completed an undergraduate degree and 36% have mothers with 12 years of schooling -40.3% chose their subject while 17.3% had their subject chosen family -13% smokers, 11% consumed alcohol, 5% occasionally exposed to drugs, ~36% did not exercise and had irregular sleep, 40% spent over 4 hours on social networking sites, more than half had a physical illness in last 6 months (39% sought care from university hospital while 16.6% did not seek care), 27% unsatisfied from health care provider services, 70% had depression history, 6.5% taking antidepressants, 51% have family depression history, 69% had past depression and 12.25% had family members who suffered from depression	-Cross-sectional study: questionnaire which involved the Patient Health Questionnaire (PHQ-9) and other covariates including: sociodemographic characteristics, economic situation, life style characteristics, personal and family history of depression, and conditions in the hostel environment -Study was conducted from April, 2018 to September, 2018	-47.3% had moderate to severe depression levels with females making up 50.7% of that percentage -Depression was found to be higher in those who had lost a year of study (these students made up 13% of all participants), those unsatisfied with their academic performance, those who spent more than 6 hours per day on social media, those with a personal history of depression and those with a family history of depression -Factors for moderate to severe depression included unsatisfactory academic performance, exposure to addictive drugs, use of social media for 6 hours or more, family history of depression, personal history of depression, and physical illness in comparison to students with mild or no depressive symptoms -Students who spent more than 6 hours daily on social media were 4.5 times more likely to experience depression -Students who had a personal history of depression were 2 times more likely to experience depression -The study found that moderate to severe depression was associated with smoking in male students
11. Mamun et al. (2022a) Gopalganj, Bangladesh: -Bangabandhu Sheikh Mujibur Rahman Science and Technology University	-To investigate suicidal ideation and associated risk factors among university students	-(n=665) -University students -Aged between 19 and 23 -67.5% were male, 65% were not in relationships, 71.7% came from rural areas, 82.6% were non-smokers, 78.8% were at risk for smartphone addiction -37.9% were at risk for Facebook addiction, 49.5% were depressed, 57% were anxious, and 46.3% were stressed	-Cross-sectional study: survey -Questions for sociodemographic variables, suicidal ideation, Depression Anxiety and Stress Scale-21 (DASS-21), Smartphone Application-Based	-Study found that there were no significant differences in all suicidal behaviours and gender with the exception of suicidal ideation happening within the past year -It was found that students who were separated or divorced had higher rates of suicidal ideation prevalence within the past year and the second highest prevalence rates were reported by students in relationships

		-In terms of suicidal ideation prevalence: 2.3% experienced it within the past day, 4.8% were within the past 15 days, 6.9% were within the past month, 14.7% were within the past year, and 61.1% were within their entire lifetimes	Addiction Scale, and Bergen Facebook Addiction Scale -Study was conducted from March, 2019 to April, 2019	-Significant factors for past-year suicidal ideation: Psychopathology, Facebook addiction, depression, anxiety, and stress -There was no association between past-year suicidal ideation and smartphone addiction -Being separated or divorced, Facebook addiction, depression, anxiety, and stress were all significantly associated with suicidal ideation
12. Mamun et al. (2022b) Dhaka, Bangladesh: -Jahangirnagar University	-To explore and investigate prevalence and associated risk predictors of depression, anxiety, and stress among students	-(n=590) -Undergraduate students -Mean age of the sample was 24.12 years -51.2% male, 51.4% were first-year university students, 87.8% were from a middle-class family, 80.5% were single, 14.6% were cigarette smokers, 44.6% had physical exercise every day, 57.3% were normal sleepers, and 47.6% used the internet for 2-5 hours daily	-Cross-sectional study: survey -Included sociodemographic questions, behavioural variables, and 21-item Bangla Depression, Anxiety and Stress Scale (BDASS-21) -Study was conducted from July, 2018 to October, 2018	-52.2% had moderate to extremely severe depression, 58.1% had moderate to extremely severe anxiety, and 24.9% had moderate to extremely severe stress -Significant risk factors for depressed students: coming from a lower-class family, being a cigarette smoker, engaging in less regular daily physical activities, having more or less sleep than recommended, using the internet for more than 5 hours daily, being anxious, and suffering from stress -Significant risk factors for anxious students: being in a relationship, suffering from depression, and suffering from stress -Significant stress risk factors: in a relationship, using the internet for more than 5 hours daily, suffering from depression, and suffering from anxiety
13. Mamun et al. (2020) Across Bangladesh: -9 reports from public medical colleges and 4 from other (private/medical institutes)	-To investigate risk factors and reasons of suicides among medical students	-(n=13) -Suicide reports of medical students	-Secondary-source study: investigated 22 months of medical student suicide reports from January 1, 2018 to November 30, 2019 -Content from all suicide news, Bangla and English mediums, were collected through Google search	-Among the 13 reported suicides: 8 were female, 7 of the 10 that reported year of study were in their final stages of study, 10 of the suicides were reported in the first half of the academic year, 12 of the suicides were done by hanging, and the most provided reason was academic distress which was 4 of the suicides (there were no reasons provided for 2 cases)

14. Ovi et al. (2024) Across Bangladesh: -83 universities (45 were private and 38 were public)	-To determine and explore the prevalence and factors of the overall mental health status among university students using a large sample	-(n=2036) -Undergraduate/postgraduate students -Data from schools with varying disciplines: physical science, applied science, life science, business administration, and fine arts -657 female and 1357 male -20% first year, 22.8% second year, 22.3% third year, 22.9% fourth year, 11.9% fifth year or master's program -61.6% managed personal expenses with family support, 17.7% handled expenses through own income, 20.6% used a combination of both -78.8% were from public and 21.2% were from private institutions -62.8% were under the age of 22 (minimum being 17 years), and 37.2% were 22 years old or older	-Cross-sectional study: online questionnaire -Included sociodemographic questions and the Goldberg's General Health Questionnaire (GHQ-12) with the use of the GHQ2+ threshold -Study was conducted from February, 2021 to April, 2021	-~25% felt worthless, 27.7% felt unhappy, 29.5% felt indecisive, 29.7% felt unable to face problems, 45% had difficulty with concentrating on tasks, and 54.5% felt they were constantly under strain -55.9% have poor mental health with 413 being females and 725 being males -Female students reported a higher percentage (62.9%) of poor mental health versus male students -Despite academic years, those with poor mental health had similar levels ranging from 51.9%-57.3% -Of those aged 17-22, 56.9% had poor mental health while this percentage is 54.2% of those older than 22 -Of those from public universities, 56.8% had poor mental health while this number is 52.4% of those from private universities -Factors: Male students were 1.49 times more likely to have good mental health versus females, those from private universities were 1.29 times more likely to have good mental health than those from public universities, and other variables (age, academic year, and sources of personal expenses) did not have significant influences on mental health status
15. Rasheduzzaman et al. (2022) Dhaka, Bangladesh: -University of Dhaka	-To investigate the prevalence and associated risk factors for suicidal behaviours among students	-(n=1844) -Undergraduate students -70% were male (less females were enrolled at the university), 84.9% came from a village area, 16.7% were cigarette smokers, 3.3% were psychoactive substance users, 10.4% had suffered from physical illnesses in the past year, 8.4% had experienced mental health psychological suffering, 12.4% reported a history of family mental illness, 2.6% reported family suicide completion, and 5.4% reported family suicide attempts -In the past year, of the participants: 31.4% had experienced stressful life events, 11.8% had failed examinations, 13.1% experienced relationship difficulties, 29.2% experienced ragging by	-Cross-sectional study: survey -Included questions regarding sociodemographic factors, perceived health-related questions, past-year stressful life events, family mental health history, and suicidal behaviours -Study was conducted from	-Past-year suicidal ideation: 13.4%, lifetime suicide plans: 6%, and ~1 lifetime suicide attempt: 4.4% -Factors for significantly higher rates of all suicidal behaviours (all suicidal behaviours refer to suicidal ideation/plan/attempt): psychoactive substances, past-year health suffering (physical and mental), past-year stressful life events, relationship and family problems, ragged by students, family history of suicide and psychiatric illness, and exam failure -Females had higher rates of all suicidal behaviours -Those in fourth year: significantly higher suicide plan and attempt rates -Students from urban areas reported higher suicidal ideation in comparison to those from rural areas -Cigarette smoking had a significant association with suicide plan and attempt -Suicidal ideation risk factors: gender, year of study, residence, past-year physical and mental illness, any

		other students, 31% had family problems, and 8% experienced other events	October, 2019 to November, 2019	type of past-year stressful life event, history of family mental illness, and family suicide attempt history -Suicide planning risk factors: gender, year of study, psychoactive substance, past-year physical and mental illness, and stressful past-year life event -Risk factors for suicide attempts: gender, year of study, psychoactive substance, past-year mental illness, past-year stressful life event, and family suicide attempt history
16. Rahman et al. (2022) Dhaka, Bangladesh: -Jahangirnagar University	-To explore and determine the prevalence and factors associated with suicidal ideation among university students	-(n=407) -University Students -Aged between 18-27 years with the mean age of 22.8 years. -54.1% were male, 88.9% were Muslim, 64.9% were from a rural area, 73% were from a nuclear family, 46.4% were from a middle socio-economic status, 46.2% experienced traumatic events in the past year, 7.9% had a family suicidal history, 30.7% had depression, and 27.3% had anxiety	-Cross-sectional study: questionnaire - Questions: sociodemographic characteristics, personal and family history, suicidal ideation, Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder (GAD-7) scale -Study was conducted from August, 2019 to December, 2019	-13.8% of the students had suicidal ideation in the last year -Students who were female, in their fifth-year of studies, lower socio-economic status, exposed to traumatic events since the past year, have a family suicidal history, have depression, and have a smoking habit were significantly more likely to experience suicidal ideation -Students in their first year of university were found to be 0.15 times less likely than those in their fifth year to have suicidal ideation -Those in their second year were 0.22 times less likely than those in their fifth year to have suicidal ideation as well
17. Rasheduzzaman et al. (2021) Dhaka, Bangladesh: -University of Dhaka	-To explore and detect the depression rate among university students as well as risk factors	-(n=1844) -Undergraduate students -69.3% male, 84.9% from a village, 16.7% cigarette smokers, 3.3% psychoactive substance users, 10.4% suffered from past-year physical illness, 8.4% suffered from past-year mental illness, 31.4% experienced past-year stressful life event, 12.4% had a family mental disorder history, 2.6% had family suicide completion history, 5.4% had family suicide attempt history, 13.4% had	-Cross-sectional study: survey -Included questions regarding sociodemographic data, perceived health-related questions, past-year stressful life events, family mental health	-28.70% reported struggling from moderate to extremely severe depression -Depression factors: female students, newer/fourth-year students, 35% of urban students, cigarette smoking was not associated but psychoactive substance use was found to be significantly associated, those who had personal health issues (physical and mental), those who had more than one past-year stressful life event (events included: exam failure, relationship and family problems, and being bullied), family history of mental illness, family history of suicide (both completion and attempts), and

		past-year suicidal ideation, 6% had ~1 lifetime suicide plan, 4.4% had ~1 lifetime suicide attempt, and 28.7% had depression -Of the 31.4% who experienced past-year stressful life event(s): 11.7% were exam failures, 13% were relationship issues, 6.5% were campus bullying, 11.5% were family problems, and 1.4% were other stressful events	history, suicidal behaviours, and the nine-item Bangla Patient Health Questionnaire -Study was conducted from October, 2019 to November, 2019	students with suicidal behaviour experiences (ideation, plan, and/or attempt) -Of the students who reported past-month suicidal ideation, 76.4% also reported being depressed while this percentage was only 23.6% for those who did not have past-month suicidal ideation -Factors that were found to be significantly associated with depression: past-year suicidal ideation, lifetime suicidal ideation, lifetime suicide plan, and lifetime suicide attempt
18. Sayeed et al. (2023) Southern Territory of Bangladesh: -Patuakhali Science and Technology University (PSTU) and Barishal University (BU)	-To explore and assess the prevalence of depression and associated factors within universities students	-(n=403) Undergraduate and post-graduate students -50.6% male, 83.4% identified themselves as Muslim, and ages ranged from 18-26 years with an average of 21.02	-Cross-sectional study: questionnaire -Questions for sociodemographic and behavioural variables plus the 21-item Beck Depression Inventory (BDI) -Study was conducted from February, 2020 to March, 2020	-52.9% showed no depressive symptoms while 47.1% did show symptoms (of which 113 were from PSTU and 77 from BU) -38.7% had clinical depressive symptoms -29.9% of PSTU and 22.8% of BU students were struggling with severe depressive symptoms -Second year students were 3.4 times more likely to experience depression while third years were 3.8 times more likely, and fourth years were 3.9 times more likely in comparison to first years -Those with a history of stressful life events, suicidal attempts, and self-reported insufficient monthly allowance from family were at a higher risk of depressive symptoms
19. Urme et al. (2022) Across Bangladesh: -5 universities	-To explore and reveal the common risk factors of suicide among public university students	-(n=35) University students as well as close friends, roommates, and teachers of university students who were studying in Bangladesh and have committed suicide -30 IDIs were conducted, and of them: 5 were close friends and classmates of the deceased students who committed suicide, 17 were male and 13 were female -5 KIIs were conducted which were all professionals from academic including an associate professor, two assistant professors, one professor, and one clinical psychologist	-Qualitative research design: In-Depth Interviews (IDIs) and Key Informant Interviews (KIIs) with semi-structured guidelines with interviews lasting from 50-60 minutes on average and in-person -Study conducted from May 14,	-Gender and economic conditions related to the suicidal ideation, behaviour, or attempt(s) of the students who committed suicide -Male students more likely to commit suicide while female students made more attempts -Suicide factors: Male students less expressive and found to have suicide reasons linked to economic downturn/getting a job while female suicides were mainly connected to relationship problems -Socio-economic class correlated to suicidal ideation (most public university students come from lower- to middle-class families and facing an economic crisis) -Suicide was found to be related to psychiatric disorders particularly depression, substance use disorders, adaption problems, and perfectionism

			2019 to August 10, 2019.	-Academic persecution and stress was suggested to enhance depression -Other suicide factors: experiencing bullying or ragging, social problems (such as social isolation), personal history of suicide attempts, and being influenced by the suicide of another student -Study found that there is an unwillingness to seek help for mental health due to stigma -There is a lack of counselling centers and services -One public university had three counselling centers (students did not have interest in using them)

PANEL ON
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