NARRATIVE REVIEW OPEN ACCESS

Eating Disorders in Bangladesh: A Narrative Review

Md. Hasan Al Banna[1] 🔗 | Satyajit Kundu[2] 🔗 | S. M. Yasir Arafat[3,4] 🔗

[1]Faculty of Nutrition and Food Science, Patuakhali Science and Technology University, Patuakhali, Bangladesh | [2]Public Health, School of Medicine and Dentistry, Griffith University, Gold Coast, Australia | [3]Department of Psychiatry, Bangladesh Specialized Hospital, Dhaka, Bangladesh | [4]Biomedical Research Foundation, Dhaka, Bangladesh

Correspondence: Md. Hasan Al Banna (banna.nfs.pstu@gmail.com) | S. M. Yasir Arafat (arafatdmc62@gmail.com)

ABSTRACT

Background and Aims: Eating disorders are complex psychiatric illnesses mostly prominent in Western countries. Little has been researched about these disorders in countries like Bangladesh. The purpose of this narrative review was to summarize the studies on eating disorders in Bangladesh, focusing on rates and associated factors.

Methods: A search was performed in PubMed, Scopus, Google, Google Scholar, and BanglaJOL on February 20, 2024, to identify the available studies on eating disorders in Bangladesh. After considering the inclusion and exclusion criteria, 10 articles were included in this review.

Results: Studies were published between 2015 and 2023 with a sample size ranging from 196 to 4076. All the studies were conducted among university students and used screening tools to assess eating disorders where the majority of the studies utilized the *Eating Attitudes Test-26*. The rate of at risk of eating disorders varies between 20.4% and 38%. Sociocultural factors, age, sex, academic attainment, marital status, family income, smoking, nutritional status, anxiety, depression, internet addiction, high religious practice, previous cosmetic surgery, and binge drinking were associated with eating disorder risk. However, all studies focused on a single population group, and no nationwide studies or research involving community populations or clinical samples were identified.

Conclusion: Although there has been an increase in research on eating disorders in Bangladesh since 2015, community-based studies using diagnostic tools are warranted. Adaptation and development of culture sensitive instruments could be an important necessity along with an enduring collaboration among researchers, stakeholders, and clinicians.

1 | Introduction

Eating disorders are a range of complex symptoms highlighted by disordered eating behaviors and psychiatric complications that have a major impact on quality of life, and social and physical functioning [1–4]. In recent decades, eating disorders have crossed the geographic boundaries of Western countries and revealed a difference between genders [3–6]. There were approximately 41.9 million persons with eating disorders in 2019 [7]. It can be a lifelong condition that typically appears at a young age (10–20 years); children, adolescents, and young adults are particularly vulnerable [4, 8]. It has been demonstrated that most individuals who suffered from eating disorders for the first time were under the age of 20–30 years [9–11]. However, the literature confirms that the prevalence of well-defined eating disorders is growing among older adults [12].

Over time, the diagnostic criteria, epidemiology and burden for eating disorders have become well-established [13, 14]. According to the *Diagnostic and Statistical Manual of Mental Disorder* (DSM-5),

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Md. Hasan Al Banna and S. M. Yasir Arafat share corresponding authorship.

eating disorders include: (i) Anorexia nervosa, (ii) Bulimia nervosa, (iii) Binge eating disorder, (iv) Other specified feeding and eating disorder, and (v) Unspecified feeding and eating disorder [1]. The Global Burden of Disease (GBD) studies demonstrate that these disorders are accountable for disability and mortality [7, 15]. Reports acknowledge anorexia nervosa was responsible for most of the deaths attributed to eating disorders worldwide in 2019 [N.B. total mortality due to eating disorder: 318.3, anorexia nervosa: 286.7 deaths, and bulimia nervosa: 49.6 deaths] [16]. Furthermore, in 2019, binge eating disorder and other specified feeding and eating disorder resulted in 3·7 million *disability-adjusted life-years* (DALYs) globally [7].

Eating disorders are linked to several risk factors, including genetic factors, biological risks (e.g., gut microbiota in dysregulation of appetite), childhood obesity, body image-related factors, and socioeconomic status [17]. The severity of eating disorder symptoms is exacerbated by comorbidity with mental health illness including personality and mood disorders [17]. Social media use may also increase the chance of developing eating disorder symptoms [17, 18]. Additionally, it has been noted that eating disorders are associated with depression, anxiety, substance addiction, suicide and higher health care expenditure [19–22]. As per a recent study, adolescents with eating disorders, particularly bulimia nervosa, showed greater risk for suicide attempt and suicide ideation [23]. Since treatment/help seeking rates for eating disorders are relatively low, an in-depth understanding about risk factors of eating disorders is crucial for the development of evidence-based intervention and treatment programs as well as public health policies [17, 24].

In the Asia and Pacific regions, eating disorders are on the rise because of several significant cultural transitions, including economic expansion, urbanization, and fundamental shifts in gender roles, family life, and nutritional practices [3, 25–27]. Despite the increasing incidence and severity of eating disorders in Asia, these disorders remain underdiagnosed in hospital settings, leading to poor treatment outcomes and increased economic costs [28, 29]. Furthermore, studies from India and Pakistan (neighboring country of Bangladesh) have shown increasing eating disorder trends, but longitudinal research on determinants of this disorder in these regions is limited [30, 31]. Bangladeshis are experiencing a nutrition transition, the prevalence of fast-food consumption and non-communicable diseases is rising and demonstrating their increased susceptibility to eating disorders [32, 33]. Given the utmost health implications and lack of epidemiological documentation of eating disorders in Bangladesh, we aimed to overview the studies conducted on this topic to see the rate and associated factors of eating disorders in the country. This review will indicate the current status of research and identify the potential research gaps in the country which may assist policymakers and public health practitioners to develop and design policy schemes for reducing the burden of eating disorders.

2 | Methods

2.1 | Study Type

This was a narrative type of review to reveal the prevalence and associated factors of eating disorders in Bangladesh. An unstructured and descriptive approach was followed as a baseline review.

2.2 | Search

A search was conducted in PubMed, Scopus, Google, Google Scholar, and BanglaJOL on February 20, 2024, to identify available evidence on different eating disorders in Bangladesh. The search was done by a single author, SMYA, on the same day. The following search terms were used to search for articles from the mentioned databases: (i) eating disorders in Bangladesh, (ii) anorexia nervosa in Bangladesh, (ii) bulimia in Bangladesh, and (iii) binge eating in Bangladesh. For effective searching in the PubMed and Scopus databases, Boolean operators (like AND and OR) were applied with search keywords.

2.3 | Eligibility Criteria

Original research articles from inception to search date were included. Studies conducted among Bangladeshi citizens living in Bangladesh were included in this review. Letter to the editors, book chapters, books, commentaries, case reports, and series, and review articles were excluded. Moreover, any articles published in non-peer-reviewed journals were excluded. Studies conducted among Bangladeshi citizens living abroad and foreign citizens living in Bangladesh were excluded from this review.

2.4 | Screening and Selection Process

Initially, the title and abstract were scrutinized to sort the articles. Then the whole article was assessed. The final selection of the articles was based on the objectives and eligibility criteria of this review. Presenting a stepwise flow diagram of the article selection process was not possible as we did not undertake a systematic review and search engines like Google, Google Scholar, and BanglaJOL do not allow the stepwise documentation. However, we mentioned a follow chart of the search (Figure 1).

2.5 | Data Charting and Summarizing

Various characteristics from the included studies were retrieved and recorded in Microsoft Excel for Windows version 10. The study features such as author name, publication year, participant, sample size, measuring instruments, data collecting year, data collection technique and place, major domain, and article summary were charted and tabulated. One author extracted and tabulated the data, while others reviewed it for accuracy as a random check. Finally, the data was compiled and summarized in the results.

3 | Results

3.1 | Characteristics of the Studies

This review included 10 studies published between 2015 and 2023 [34–43] (Table 1). We found the first study on eating
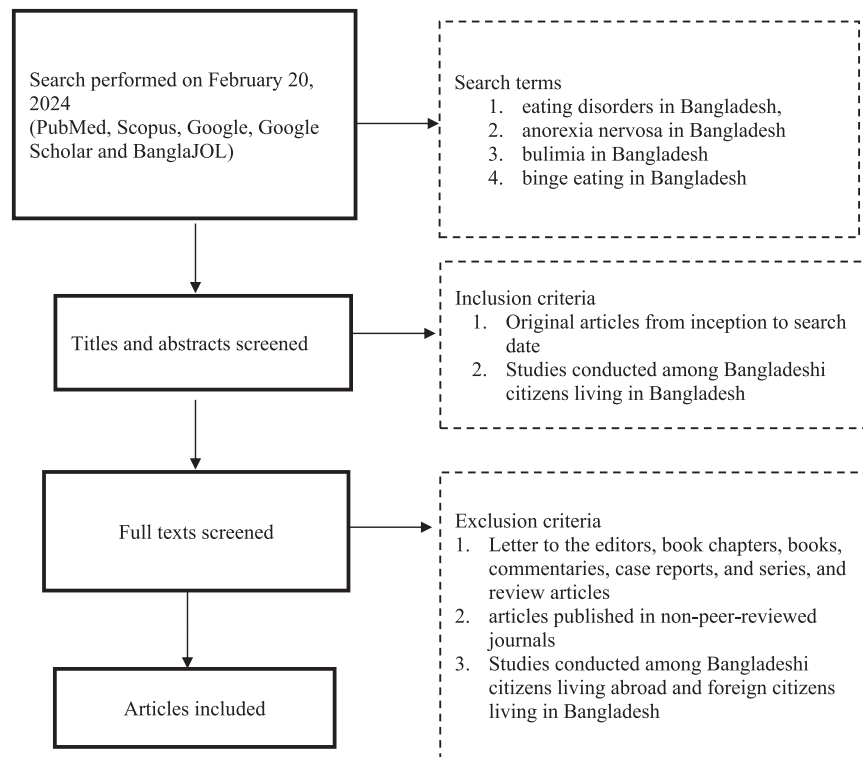
FIGURE 1 | Follow chart of the search.

disorders was published in 2015. More studies have been published after 2020. All studies had a cross-sectional design and were conducted among university students and used screening tools. No nationwide study among community people, studies in clinical sample, studies using diagnostic instruments, and qualitative studies were identified. Sample sizes ranged from 196 to 4076. Data collection of the studies was performed between 2013 and 2023.

3.2 | Domains Studied

Three studies assessed the impact of the COVID-19 pandemic on eating habit [39, 42, 43], one study assessed food neophobia [41], one studied binge eating disorder [34], and the other five studies assessed disordered eating or eating disorder risk [35–38, 40] (Table 1).

3.3 | Instruments Used

Eight studies used structured instruments, five used the *Eating Attitudes Test-26* (EAT-26), one used *Binge Eating Disorder Screener-7* (BEDS-7), one used *Food Neophobia Scale* (FNS), and *modified Yale Food Addiction Scale* (mYFAS) (Table 1). All studies ($n = 5$) used the EAT-26 scale to assess eating disorder risk based on a standardized cut-off point of ≥ 20 in the range of 0–78 [35–38, 40]. The BEDS-7 was used to assess the symptoms of binge eating disorder (yes vs. no) with validated scoring procedure [34]. The mY-FAS and FNS instruments were used to explore food addiction and food neophobia, respectively, and used continuous score to predictor analysis [41, 43]. However, Sultana et al. (2022) utilized an outdated scale to assess food addiction [43].

3.4 | Rate and Associated Factors of Eating Disorder Risk

The prevalence of eating disorder risk varies between 20.4% and 38% [35–38, 40] (Figure 2). The five studies fit different multiple binary logistic regression models to explore the predictors of eating disorder risk. Female sex, younger age (17–21 years), late adolescent (17–19 years), overweight/obese, high religious involvement, overweight body perception, previous cosmetic surgery, current binge drinking, anxiety, depression, moderate to severe internet addiction, and high/strong interest in fashionable clothes were significantly associated with an elevated risk of eating disorder [35–38, 40].

3.5 | Binge Eating

Abid et al. (2023) found that the prevalence of binge eating disorder symptoms was 20.6% [34]. A binary logistic regression model (adjusted) identified male sex, age ≥ 24 years, overweight/obesity, and depression as risk factors for binge eating disorder symptoms [34].

3.6 | Food Addiction

Sultana et al. (2022) reported that 7.5% of surveyed individuals had food addiction [43]. They utilized multivariable linear regression analysis and found that female sex, marriage, first level of university, smoking, overweight/obesity, having fitness goals and feelings of guilt always when violating food rules, poor social interactions, and weight loss, compared to the

TABLE 1 | Characteristics of the included studies ($n = 10$).

Study	Participant	Sample size	Measuring instrument	Data collection year	Data collection technique	Data collection place	Major domain	Summary of the article
Abid et al. (2023) [34]	University students	525	Binge eating disorder screener	2022–23	Interview		Binge Eating	This study assessed the rate and associated factors of binge eating among university students. It found that the prevalence of risky persons for binge eating disorder was 20.6%. Age of the participants, smoking habit, body weight, and depression was associated with the symptoms. Causal interference, generalization, and response biases were the notable limitations of this study.
Ahasan et al. (2023) [35]	University female students	196	EAT-26	2019	Self-reporting response	Dhaka	Cultural influence on eating disorder	This study found that about 37% of participants had a risk of developing eating disorders. It also revealed some cultural factors predisposing to the risk of the development of an eating disorder. This study didn't acknowledge methodological weaknesses related to study design and sampling. This study only noted that objective measures were not included in the questionnaire.
Banna et al. (2023) [36]	University students	700	EAT-26	2022	Interview		Rate and factors of eating disorders	The study found proportion of students with risk of eating disorder was 30.6%. It found that age, sex, academic attainment, family income, smoking, nutritional status, anxiety, depression, and internet addiction were associated factors for eating disorder. Cross-sectional study design, using screening tool (instead clinical diagnosis) measure the outcome, response and social-desirability biases were mentioned as limitations of this study.

(Continues)

TABLE 1 | (Continued)

Study	Participant	Sample size	Measuring instrument	Data collection year	Data collection technique	Data collection place	Major domain	Summary of the article
Banna et al. (2021) [37]	University students	365	EAT-26	2019	Self-reporting response	Patuakhali	Rate and factors of eating disorders	The study revealed the prevalence was 23%. It found that female gender, 17-21 years of age, obesity were associated with risk of eating disorders. Causality and generalization of the findings were limited.
Banna et al. (2021) [38]	University students	398	EAT-26	2019-20	Interview	Patuakhali	Obesity and eating disorder	The study revealed the prevalence was 20.4%. It found that overweight and obesity were associated with risk of eating disorders. This study mentioned the weakness of causal associations and self-reporting biases.
Hossain et al. (2022) [39]	University students	1602		2021	Online survey	Dhaka	COVID-19 lockdown and eating habits	The study found that food 35.1% of students took larger meals and the proportions of obese and overweight increased during the COVID-19 lockdown. Since the survey was online-based, there was no chance to cross-evaluate the data quality and fair responses from the respondents.
Pengpid et al. (2015) [40]	University students	800	EAT-26	2013-14	Interview	Dhaka	Eating disorder and associated factors	The study found that 37.6% of students were at risk of eating disorders. It also revealed that students at late adolescence, perceived obesity, high religion practice, previous cosmetic surgery and binge drinking were associated with an eating disorder risk. This was one of the very first studies in Bangladesh that exploring eating disorder risk. The potential methodological flaws were acknowledged.

(Continues)

TABLE 1 | (Continued)

| Study	Participant	Sample size	Measuring instrument	Data collection year	Data collection technique	Data collection place	Major domain	Summary of the article
Sahrin et al. (2023) [41]	University students	500	Food neophobia scale	2022	Interview	Dhaka, Chattogram and Barishal	Rate and factors of food neophobia	The study found the mean score of food neophobia scale was 37.45. It found female gender, better family income, malnourishment, and food allergy were associated with food neophobia. This study mentioned to consider some limitations when interpreting the results such as cross-sectional data, limits generalization, reporting biases, etc.
Shaun et al. (2021) [42]	University students	394		2021	Online survey		COVID-19 lockdown and eating habits	It identified the changes of eating habits and physical activities during the COVID-19 pandemic. This study was limited to self-administrated questionnaire, convenience sampling method, and cross-sectional study design.
Sultana et al. (2022) [43]	University students	4076	Modified yale food addiction scale	2021	Online survey		COVID-19 lockdown and eating habits	It found that 1.7% had orthorexia and 5.7% had food addiction. The study used an older instrument. Sample size of this study was highest among our reviewed studies.
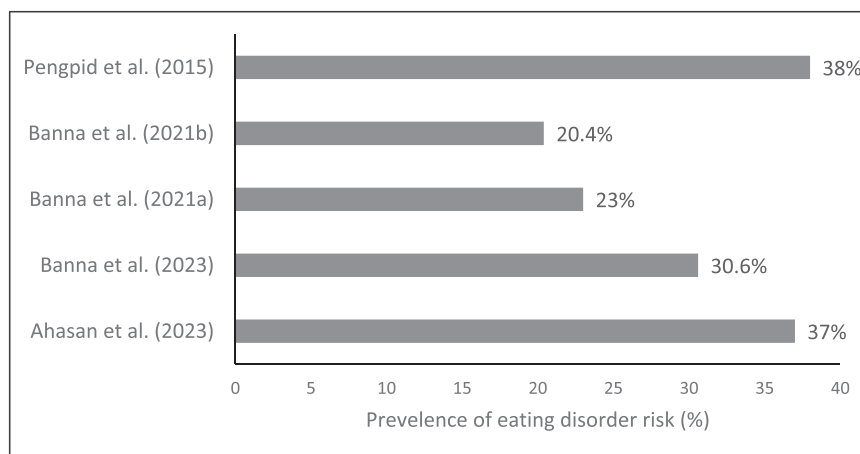
FIGURE 2 | Reported prevalence of eating disorder risk among young adults (university students) in Bangladesh. Data were retrieved from the five studies [35–38, 40].

pre-COVID-19 period, were significantly associated with food addiction.

3.7 | Food Neophobia

Sahrin and colleagues (2023) concluded that food neophobia (unwillingness to eat and/or avoid new or unfamiliar foods) was prevalent among the study participants [41]. As per the constructed multiple adjusted linear regression model, female sex, underweight, food allergy and history of sickness after eating a new food item were found to be positively correlated with food neophobia (i.e., these variables related to greater risk of developing food neophobia) [41]. Moreover, higher family income (per month) and being overweight were associated with lower probability of developing food neophobia [41].

4 | Discussion

4.1 | Major Findings of This Review

In this review, it is found that 20.4%–38% of university students are at risk of eating disorders in Bangladesh. An eating disorder risk was linked to sociocultural factors, age, sex, marital status, family income, academic achievement, smoking, nutritional status, anxiety, depression, internet addiction, high religious practice, prior cosmetic surgery, and binge drinking. Major research gaps were identified, that is, no nationwide study among community people, no study with clinical sample, no study with diagnostic instruments, and no qualitative study were identified.

4.2 | Comparison and Justification of the Findings

The prevalence of eating disorders varies across different populations and studies. While studies conducted in Pakistan [44] and the United States [45] align with the findings, several studies conducted in India [46], Malaysia [47], China [48, 49], and the United States [50] found the prevalence to be lower. Primarily, due to the use of screening instruments while assessing the disorder. No diagnostic instruments were used in the studies included in this review. Our study, like many others, used screening tools (EAT-26) rather than diagnostic instruments. This may lead to higher prevalence estimates as screening tools are designed to be more sensitive, potentially capturing subclinical cases [37]. Secondly, due to the acknowledgeable sociocultural differences, family background, and study population [37]. Traditionally, these disorders were more prevalent among upper socioeconomic groups [51]. Moreover, the economic transition of Bangladesh, higher exposure, and greater adaptation to Western culture standardizing Western beauty and lifestyle could be the possible explanation behind the higher prevalence of eating disorders in Bangladesh [52]. Additionally, the contributors to disordered eating behaviors can vary by culture and beliefs. For example, in Hong Kong and India, some instances of anorexia have been linked to religious fasting or unconventional dietary beliefs rather than a fear of gaining weight [53].

Sex was found to be significantly associated with eating disorders. While some studies found males to be at higher risk of having eating disorders [34, 38] others found females to be at higher risk [36, 37, 41, 43]. Both of these findings were supported by previous literature. Studies conducted among the university or equivalent-level students in Turkey [54], Malaysia Sarawak [47], and China [49] found eating disorders to be higher among females compared to males. Additionally, higher consumption of fast food and increased prevalence of overweight and obesity among males were reasoned to be a possible factor contributing to eating disorders [55]. On the other hand, the higher tendency of females to adopt Western body standards and wear fashionable clothes makes them more susceptible to eating disorders to maintain their perceived ideal body shape [35].

Abid et al. found the older age group of > 24 years to be at higher risk of having eating disorders while another study on Bangladeshi public university students found eating disorders to be higher among the younger participants between the age of 17–21. In line with this finding, previous studies were found to be conducted in Iran [56] and Saudi Arabia [57]. The higher prevalence of eating disorders among an older age group was

supported by a study conducted on the elderly population [58]. However, more freedom in food choice and the combination of lifestyle and behavioral changes, related to alterations in family and peer settings, made the younger population more prone to eating disorders [37]. Evidence suggests that with increasing age, stressors and body image concerns rise which makes older people more predisposed to unhealthy eating behaviors [34].

The apparent contradictions in our findings regarding sex and age differences in eating disorder risk reflect the complex nature of these conditions and the variability in research outcomes. These discrepancies may be attributed to several factors. First, cultural context plays a significant role; in some societies, men may face unique pressures related to body image and eating behaviors. Second, methodological approaches vary across studies; some may use screening tools more sensitive to female-typical symptoms, potentially underestimating male prevalence [59, 60]. Third, study design, including sample selection and size, can influence results. Additionally, the type of eating disorder being studied matters; while anorexia and bulimia are generally more common in women, binge eating disorder shows more equal gender distribution [60]. Lastly, changing societal norms and increased awareness may lead to better recognition and reporting of eating disorders among men, potentially explaining some of the variability in recent findings [61]. These factors underscore the importance of considering multiple variables when interpreting and comparing results across studies. However, further studies are needed to explore the complex interplay between sociocultural norms, globalization, and religious beliefs in Bangladesh and how these factors influence the development of eating disorders in the country.

Compared to the normal-weight participants based on BMI, overweight or obese participants were found more likely to have eating disorders. Most of the literature included in this study consistently reported the same finding. This finding also coincides with the findings conducted in Pakistan [44], Turkey [54], and Saudi Arabia [57]. Grilo et al. also found a similar pattern of results suggesting a link between BMI and eating disorders [45]. The relationship between BMI and the eating disorder has been mentioned as a two-edged sword. Individuals with higher BMI are supposedly at higher risk of having eating disorders due to a greater tendency to binge eat out of depression formed by body dissatisfaction [62]. On the contrary, an individual might also become prone to disordered eating behavior with the aim of achieving a lean body [37]. Overweight individuals may engage in restrictive eating behaviors in an attempt to lose weight, while underweight individuals may develop a fear of weight gain. This can lead to a cycle of body dissatisfaction and disordered eating behaviors [63]. This relationship could be because individuals with higher BMIs often experience a greater discrepancy between their actual and ideal body shape [64], while underweight individuals are vulnerable to societal pressures for thinness [65].

Ahsan et al. found a significant association between exposure to Indian TV serials with eating disorders. The probable reason behind the higher association could be due to the selection of the study population. Adolescent girls are generally found to be more concerned about their body image [66] and have a higher tendency to wear fashionable clothes. In addition, evidence suggests that the image of an "ideal" body could be a great source of body dissatisfaction [67], and media exposure was found to be associated with body image dissatisfaction [68, 69]. Thus, Indian TV serials and beauty standards could be possible reasons behind the eating disorders, aimed at achieving the set beauty standard.

Depression and anxiety are significant factors interfering with a healthy lifestyle and in turn, affecting eating habits and food choices [70]. Expectedly, depression and anxiety have been found to be associated with eating disorders among university students in Bangladesh. A similar finding was also reported by the studies conducted in Turkey [70, 71], Canada [72] and ASEAN [73]. The most reasonable explanation for this finding could be the exhibition of disordered eating behavior to minimize the negative emotions from depression and uncompassionate self-awareness [74]. On another note, disordered eating could simply be a manifestation of a higher level of stress and emotion among the mentally distressed anxious students [75].

Interestingly, addiction to the internet or a smartphone was found to be a significant factor in determining the risk of developing an eating disorder among university students in Bangladesh. The risk of eating disorders was found to be higher among the participants with moderate to severe internet addiction. Although previous studies [76, 77] support this finding, the higher prevalence of internet addiction among university students in Bangladesh could be a possible reason behind such findings [78]. Additionally, overuse of the internet is associated with increased tendencies of online high-caloric food ordering leading to unhealthy food habits like overeating or binge eating [36]. Such increased exposure to unrealistic body ideals on social media, easy access to online food ordering, and the use of the internet as a coping mechanism for body image concerns could collectively be an explanation for the relationship between internet addiction and eating disorders [79]. While this relationship is supported mostly by international studies and there is a lack of local studies to completely understand the phenomenon, highlighting a gap for more Bangladesh-specific research in the future to understand this relationship in the local context. In addition, considering the increased use of the internet and smartphones among young people in Bangladesh [80, 81], multi-component interventions addressing both internet use and eating behaviors could be designed and implemented in Bangladesh, particularly in the university context.

Aligned with the findings from previous studies [82–84], family income has been found to be significantly associated with eating disorders like food neophobia among university students in Bangladesh. Participants from higher-income families were found to have lower food neophobia than the participants belonging to families with lower monthly income. Fewer food restrictions among children from high-income families and exposure to a greater variety of food could be a plausible reason behind these findings [82].

4.3 | Implications of Study Findings

Based on the findings from this review on eating disorders in Bangladesh, the following policy recommendations to address this important public health issue could be suggested:

i. Bangladeshi university students are disproportionately at risk of eating disorders, according to the report. Programs to raise awareness and educate the public about eating disorders should be started by the government in cooperation with academic institutions. This could be covered in workshops and seminars or added to the curriculum.

ii. The dearth of comprehensive qualitative or mixed-method studies, as well as national studies, and clinical studies on eating disorders in Bangladesh, has been brought to light by our research. To obtain a more comprehensive knowledge of the prevalence of these illnesses in the general population, it would be advantageous for the government and relevant stakeholders to commission such research that would also offer a foundation of evidence for the creation of policies and interventions in Bangladesh.

iii. Given the correlation between eating disorders and other mental health conditions including depression, anxiety, and internet addiction, comprehensive mental health policies that treat these interrelated conditions are necessary. There is a need for multidisciplinary approach involving medical professionals, mental health experts, policymakers, educators, and the community to effectively address this issue.

iv. Importantly, the studies were conducted among university students indicating a clear gap in the evidence. Therefore, additional studies with qualitative and/mixed method design are warranted to understand the personal complexities. Moreover, longitudinal studies are needed to understand the trends and changes over the years and decades.

4.4 | Strengths and Limitations

To the best of the authors' knowledge, this is the first review on eating disorders in Bangladesh. However, several important limitations should be considered. Firstly, the search was not systematic, which may challenge the selection of the articles. Secondly, article selection and data extraction were performed by a single author which may raise concerns of biases (if any). Most of the studies included in our review were cross-sectional in design, which limits our ability to draw causal inferences about the risk factors associated with eating disorders. Additionally, the reviewed literature primarily focused on university students, which may restrict the generalizability of our findings to other populations in Bangladesh. Most of the studies relied on self-report measures and screening tools rather than formal diagnosis, potentially affecting the accuracy of prevalence estimates, emphasizing the need for more comprehensive and diverse research approaches through a formal diagnosis of eating disorders incorporating different age groups in future studies. Furthermore, there was considerable variability in sample sizes across studies, with some having relatively small samples that could impact the precision of the estimates. Despite these limitations, our review provides valuable insights into the overview of prevalence and risk factors of eating disorders among Bangladeshi university students. Our findings underscore the need for culturally sensitive interventions and further research in this population, contributing to the existing literature by offering a focused examination of eating disorders within this specific context.

5 | Conclusions

This review indicates that eating disorders are under-researched in clinical and research entities in Bangladesh, albeit, recently, studies are being produced focusing it among university students using screening tools. Studies using diagnostic tools among various populations like clinical and community populations are warranted to measure the service burden and unmet needs. Special attention from universities is warranted targeting awareness build-up among the students and offering psychosocial support for them. Adaptation and development of culture sensitive instruments could be an important necessity for conducting research in clinical settings. An enduring collaboration among researchers, university authorities, and clinicians would be needed.

Ethics Statement

Ethical approval was not required, as no primary data from human subjects were collected. However, high ethical standards were ensured in the inclusion of selected studies, adhering to the ethical guidelines of the original studies.

Conflicts of Interest

The authors declare that they have no potential conflict of interest. However, we acknowledge that S. M. Yasir Arafat (coauthor of this manuscript) is a member of the editorial board of the "Health Science Reports" journal. Therefore, he must be excluded from the editorial or peer-review process of this manuscript.

Data Availability Statement

The data that support the findings of this study will be provided on request.

Transparency Statement

The lead author Md. Hasan Al Banna, S. M. Yasir Arafat affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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