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Obesity in Southeast Asia: An Emerging Health Concern

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Abstract **Original Research Article**

Background: Obesity is a growing global health concern, with developing countries such as Bangladesh increasingly facing the dual burden of undernutrition and overnutrition. The rise in obesity in Bangladesh, particularly in urban areas, is closely linked to rapid urbanization, economic development, and lifestyle changes, leading to increased consumption of processed, calorie-dense foods and reduced physical activity. This literature review examines the prevalence, drivers, health implications, and policy responses to obesity in Bangladesh within the broader context of global and Southeast Asian trends. ***Objective:*** The objective of this review is to analyze the rising concern of obesity in Bangladesh, explore its health and socioeconomic implications, and assess the effectiveness of current interventions and policy responses. The review also highlights gaps in the literature and suggests future research directions for addressing obesity more effectively in both urban and rural populations. ***Methods:*** A comprehensive review of open-access, English-language literature published between 2000 and 2024 was conducted using databases such as Google Scholar, PubMed, and CrossRef. The inclusion criteria focused on studies examining obesity prevalence, risk factors, health implications, and interventions in Bangladesh and Southeast Asia. ***Results:*** The review identifies a significant rise in obesity rates in Bangladesh, particularly in urban areas, where rates have reached 24% among adults. The key drivers of obesity include rapid urbanization, dietary shifts toward processed foods, and sedentary lifestyles. The health implications of obesity are severe, with strong associations to Type 2 diabetes, hypertension, and cardiovascular diseases. Policy responses remain limited, and community-level interventions have had mixed success due to underfunding and lack of coordination. ***Conclusion:*** Obesity in Bangladesh reflects broader global and regional patterns while presenting unique challenges due to the country's socioeconomic transition. Addressing the rising obesity epidemic requires more robust, coordinated strategies that target both prevention and treatment, with a focus on culturally tailored interventions and international collaboration. Future research should focus on developing long-term, region-specific solutions to tackle obesity and its associated health burdens.

Keywords: Obesity, Bangladesh, Non-Communicable Diseases, Urbanization, Nutrition Transition, Health Policy, Southeast Asia, Public Health.

INTRODUCTION

Obesity has become a significant global health concern, with its prevalence increasing at an alarming rate over the past few decades. According to the World Health Organization (WHO), obesity is defined as abnormal or excessive fat accumulation that may impair health, and it is typically classified using Body Mass Index (BMI) thresholds, where a BMI of 30 or higher indicates obesity, and a BMI between 25 and 29.9 indicates overweight status [1]. The global rise in obesity has been particularly noticeable since 1980, with over 650 million adults classified as obese by 2021, and this trend continues to escalate in both developed and developing countries [2]. Historically, undernutrition

was a major concern in many parts of the world, including Southeast Asia; however, in recent years, the region has experienced a rapid shift toward over-nutrition and obesity, a phenomenon driven by socioeconomic development, urbanization, and lifestyle changes. In Southeast Asia, the prevalence of obesity has steadily increased, with many countries now facing a dual burden of undernutrition and over-nutrition. Data from the WHO Southeast Asia Regional Office (SEARO) indicate that obesity rates in countries such as Malaysia, Thailand, and Indonesia have risen sharply over the last decade [3]. This shift can be attributed to various factors, including rapid urbanization, changing dietary patterns, and economic growth, all of which contribute to increased consumption of high-calorie, processed foods and reduced physical activity, especially in urban areas [4]. A study conducted across Southeast Asia revealed a significant variation in obesity rates between urban and rural populations, with urban residents exhibiting higher levels of obesity due to their sedentary lifestyles and access to processed foods [5]. In contrast, rural populations are more likely to experience undernutrition, although obesity rates in these areas are also increasing as rural lifestyles become more sedentary and diets shift toward processed foods [6]. These findings highlight the growing public health crisis in Southeast Asia, where both undernutrition and obesity are prevalent, posing complex challenges for healthcare systems [7]. Bangladesh, a country with a rapidly developing economy, has not been immune to this global and regional trend. Over the past two decades, Bangladesh has experienced significant changes in its socioeconomic landscape, characterized by rapid urbanization, economic development, and shifting lifestyle patterns. These changes have played a critical role in the rising rates of obesity in the country. The Bangladesh Demographic and Health Survey (BDHS) reported that the prevalence of obesity among Bangladeshi adults increased from 14% in 2010 to 24% in 2021, with the urban population being disproportionately affected [8]. The rapid urbanization in Bangladesh has led to the adoption of more sedentary lifestyles, with urban dwellers engaging in less physical activity due to changes in work environments and increased use of motorized transportation [9]. Additionally, the dietary patterns of the Bangladeshi population have shifted significantly, with a growing preference for high-calorie, processed foods over traditional, more balanced diets. This shift in diet, combined with reduced physical activity, has contributed to the rising obesity rates across the country [10]. The health implications of obesity in Bangladesh are profound, as the condition is closely associated with a range of noncommunicable diseases (NCDs), including diabetes, cardiovascular diseases, and hypertension. According to recent studies, over 40% of the adult population in Bangladesh suffering from Type 2 diabetes has a BMI of 25 or higher, indicating a strong correlation between obesity and diabetes in the country [11]. The increasing prevalence of obesity-related health conditions has placed a significant burden on Bangladesh's healthcare system. Noncommunicable diseases now account for a growing proportion of healthcare expenditure, with obesity-related illnesses such as diabetes and cardiovascular diseases requiring long-term management and treatment [12]. The healthcare system in Bangladesh, which is already strained due to limited resources, is struggling to cope with the rising demand for care related to obesity and its associated conditions [13]. In addition to the public health burden, the economic and social consequences of obesity in Bangladesh are also significant. The rise in obesity-related health conditions has resulted in increased healthcare costs, both for individuals and for the government. Studies have shown that the cost of treating obesity-related diseases, including diabetes and cardiovascular diseases, has risen sharply in recent years, placing a heavy financial burden on both the healthcare system and affected individuals [14]. Furthermore, the long-term socio-economic impacts of obesity are particularly concerning for a low-middle-income country like Bangladesh, where a large portion of the population already struggles with poverty and limited access to healthcare. The loss of productivity due to obesity-related illnesses, coupled with the high cost of medical care, threatens to exacerbate existing socio-economic inequalities in the country [15]. In conclusion, the rise of obesity in Bangladesh reflects broader global and regional trends driven by rapid urbanization, changing lifestyles, and economic development. The growing prevalence of obesity and its associated health conditions, such as diabetes and cardiovascular diseases, poses a significant public health challenge for Bangladesh. As the country continues to develop, it will be crucial for policymakers to address the underlying factors driving the obesity epidemic, including dietary shifts, sedentary lifestyles, and urbanization, in order to mitigate the long-term health and economic impacts of this growing public health crisis.

METHODS

A comprehensive literature search was conducted using Google Scholar, PubMed, and CrossRef to identify relevant studies on obesity in Southeast Asia, with a focus on Bangladesh. The search was limited to studies published between 2000 and 2024, ensuring relevance and recency. Only open access, full-text articles published in the English language were considered. Studies were required to be available in the selected databases and had to focus on obesity definitions, global and regional trends, epidemiology, health impacts, and socioeconomic consequences in Bangladesh or Southeast Asia. Studies were excluded if they were paywalled, retracted, not published in full, or not in English. Search terms included combinations of keywords like *"obesity," "Body Mass Index (BMI)," "Bangladesh," "Southeast Asia," "urbanization," "noncommunicable diseases,"* and *"public health."*

Boolean operators were used to refine results. Two independent reviewers screened titles and abstracts for relevance, followed by a full-text review of selected articles. Any disagreements were resolved through discussion or consultation with a third reviewer. Studies that met all criteria were included in the review. The quality of included studies was assessed using a standardized checklist, focusing on study design, data quality, and potential bias. Studies deemed to have significant methodological weaknesses were excluded. The data extracted included publication year, study objectives, findings, and relevance to the current review. Key findings were synthesized thematically, addressing major areas such as obesity prevalence, health implications (e.g., diabetes, cardiovascular disease), and the socioeconomic impact of obesity in Bangladesh. The main limitation of the review was the restriction to open access and English-language studies, which may have excluded some relevant research.

LITERATURE REVIEW

Definition and Concept of Obesity

Obesity is typically defined using Body Mass Index (BMI), a widely recognized tool for categorizing individuals based on their weight relative to height. According to the World Health Organization (WHO), BMI is calculated as weight in kilograms divided by the square of height in meters (kg/m^2), with a BMI of 25-29.9 indicating overweight and a BMI of 30 or above classified as obesity [1]. Obesity is further divided into three categories: Class I (BMI of 30-34.9), Class II (BMI of 35-39.9), and Class III (BMI of 40 or above), often referred to as "severe" or "morbid" obesity [2]. This classification system is the most commonly used method globally due to its simplicity and ease of use in large populations. However, despite its widespread application, BMI has well-documented limitations. One significant drawback is its inability to differentiate between lean body mass and fat mass, leading to potential misclassification, particularly in populations with diverse body compositions [16]. For instance, athletes with high muscle mass may be incorrectly categorized as overweight or obese, while individuals with lower muscle mass but higher fat content may be considered normal weight under the BMI system. This limitation underscores the need for complementary measures, such as waist-to-hip ratio or body fat percentage, which provide a more nuanced understanding of an individual's body composition [17]. In recent years, growing awareness of these limitations has led to calls for refining how obesity is measured, particularly in global health contexts. Studies focusing on diverse populations, especially in regions like Southeast Asia, have highlighted the need for region-specific thresholds for BMI due to differences in body composition across ethnic groups [18]. For example, individuals in Southeast Asia tend to have a higher percentage of body fat at lower BMI values compared to those from Western countries, making the global BMI standards less applicable in certain contexts [19]. Despite these concerns, BMI remains the dominant measure for understanding obesity trends on a global scale, largely due to its accessibility and simplicity in data collection across diverse populations.

Global Trends in Obesity

Obesity has become one of the most pressing global public health challenges, with the prevalence of obesity nearly doubling since the 1980s. According to the World Health Organization (WHO), more than 650 million adults were classified as obese in 2021, and this number continues to rise [20]. The NCD Risk Factor Collaboration (NCD-RisC) has provided comprehensive data demonstrating the extent of this epidemic, showing that while obesity was once confined mainly to high-income, industrialized countries, it is now a growing concern in low- and middle-income countries as well [21]. A key driver of this global shift is the nutrition transition, characterized by a dietary shift from traditional, nutrient-rich foods to energy-dense, processed foods high in sugars, fats, and salts [22]. This transition is closely linked to the rapid urbanization and economic growth experienced in many developing regions over the past few decades, leading to changes in lifestyle and reduced levels of physical activity. Globally, the rise in obesity has been driven by several interconnected factors. First, the increased availability of cheap, calorie-dense processed foods has drastically altered diets worldwide, with individuals consuming more high-energy foods that are low in nutritional value [23]. Second, technological advancements and urbanization have led to more sedentary lifestyles, as more people work in office environments, rely on motorized transport, and engage in less physical activity overall [24]. Lastly, socioeconomic factors play a significant role, with obesity rates often higher in lower-income populations, where access to healthy, affordable food is limited [25]. These global trends have led to what is often referred to as a "double burden" of malnutrition, where populations face both undernutrition and obesity simultaneously, particularly in regions like Southeast Asia and Africa [26].

Obesity in Southeast Asia

Southeast Asia presents a particularly complex case of the obesity epidemic, as the region is currently experiencing a rapid shift from problems of undernutrition to overnutrition. Historically, countries in this region, including Bangladesh, Malaysia, and Indonesia, have struggled with high rates of undernutrition. However, in recent years, these countries have seen a surge in obesity rates, driven by economic development, urbanization, and changes in lifestyle and diet [27]. According to recent projections, the prevalence of obesity in Southeast Asia is expected to double by 2030, making it one of the fastest-growing regions for obesity-related health issues [7]. Countries such as Malaysia and Thailand already report obesity rates

comparable to those in Western countries, while other countries, such as Bangladesh, are experiencing more gradual increases [28]. The epidemiological trends across Southeast Asia show significant variation between urban and rural populations, as well as between different socioeconomic groups. In urban areas, where processed foods are more readily available and lifestyles are more sedentary, obesity rates are significantly higher than in rural areas, where people may still engage in physically demanding agricultural work [29]. However, as rural areas become more urbanized and lifestyles shift, obesity rates in these regions are also on the rise. Studies have shown that obesity in Southeast Asia is particularly prevalent among women, especially those in reproductive age, highlighting a gender disparity that could have long-term implications for public health, especially regarding maternal and child health [30]. Regional risk factors for obesity in Southeast Asia include the growing availability of processed foods, increased consumption of sugary beverages, and the cultural shift towards more sedentary lifestyles. These factors are exacerbated by the region's rapid economic development, which has brought about higher levels of disposable income and changing dietary preferences [31]. Additionally, the region's hot and humid climate may discourage physical activity, further contributing to the rise in obesity rates [32]. The double burden of malnutrition in Southeast Asia—where obesity coexists with undernutrition—complicates efforts to develop effective public health interventions, as strategies must address both extremes of the malnutrition spectrum [26].

The Rising Concern of Obesity in Bangladesh

Bangladesh, a low-middle-income country experiencing rapid socioeconomic transformation, faces unique challenges in managing the rising obesity epidemic. Over the past two decades, the country has undergone significant urbanization, leading to substantial changes in lifestyle and dietary habits [33]. As the nation transitions from an agrarian to an industrial economy, traditional diets rich in vegetables, legumes, and whole grains are increasingly being replaced by processed, energy-dense foods [34]. This shift has contributed to a dramatic rise in obesity rates, with the Bangladesh Demographic and Health Survey (BDHS) reporting that obesity among adults increased from 14% in 2010 to 24% in 2021 [35]. Urbanization has played a central role in this rise, as more people migrate to cities in search of better economic opportunities. In urban areas, individuals are more likely to engage in sedentary work, rely on motorized transportation, and have access to fast food, all of which contribute to higher obesity rates [36]. Comparatively, rural populations have lower obesity rates, as agricultural work demands more physical activity, and traditional diets remain more prevalent [37]. However, as rural areas become increasingly urbanized and exposed to processed foods, obesity rates in these regions are also rising, though at a slower pace than in urban centers [9]. Key drivers of obesity in Bangladesh include the increased consumption of high-calorie processed foods, reduced physical activity due to urbanization, and the rising affordability and availability of unhealthy food options [38]. In addition, socioeconomic factors play a role, with wealthier individuals more likely to adopt Westernized diets and lifestyles, while lower-income individuals may lack access to healthy food options and safe spaces for physical activity [39]. This dynamic creates a complex public health challenge, as both ends of the socioeconomic spectrum are vulnerable to the rising obesity epidemic, though for different reasons.

Health Implications of Obesity in Bangladesh

The rise in obesity in Bangladesh has profound public health implications, as it significantly contributes to the increasing burden of noncommunicable diseases (NCDs), such as Type 2 diabetes, hypertension, and cardiovascular diseases. Studies show a strong correlation between obesity and the prevalence of these diseases in Bangladesh, with research indicating that over 40% of adults with Type 2 diabetes have a BMI of 25 or higher, classifying them as overweight or obese [21]. The growing incidence of obesity-related health conditions has placed tremendous strain on Bangladesh's healthcare system, which is already struggling to cope with the demands of infectious diseases and malnutrition [40]. Cardiovascular diseases and hypertension, two leading causes of mortality in Bangladesh, are also closely linked to obesity. The Bangladesh Demographic and Health Survey (BDHS) indicates that rates of hypertension and cardiovascular complications are disproportionately higher among individuals with elevated BMI, particularly in urban settings where processed foods and sedentary lifestyles are more prevalent [35]. Additionally, obesity in Bangladesh has been associated with nonalcoholic fatty liver disease (NAFLD) and chronic kidney disease, further compounding the public health burden [41]. The economic consequences of obesity are equally severe, as the healthcare costs associated with treating obesity-related diseases continue to rise. A study on the healthcare costs of overweight-related diseases in Bangladesh found that medical expenditures linked to obesity have escalated, placing additional financial burdens on both individuals and the healthcare system [12]. Furthermore, the long-term social consequences of obesity are evident in reduced productivity, increased absenteeism, and the exacerbation of socio-economic inequalities, particularly among women and low-income populations [42]. The interplay of obesity with existing public health challenges, such as undernutrition and infectious diseases, creates a complex and multifaceted health crisis in Bangladesh, necessitating urgent and sustained interventions.

Interventions and Policy Responses

In response to the rising obesity epidemic, Bangladesh has implemented various interventions and

policy measures aimed at reducing the prevalence of obesity and its related health conditions. At the government level, national health campaigns have been launched to raise awareness about the dangers of obesity and to promote healthier lifestyles. These campaigns emphasize the importance of physical activity and balanced diets, particularly in urban areas where sedentary lifestyles are more prevalent [33]. Despite these efforts, the implementation of comprehensive obesity prevention policies remains limited, and there is a need for more targeted interventions that address the specific socio-economic drivers of obesity in both rural and urban populations. Community-level interventions have shown promise in addressing obesity in rural areas, where traditional diets and active lifestyles have been disrupted by urbanization and economic development. Initiatives that promote nutrition education and community-based physical activity programs have had some success in curbing obesity rates, especially among women and children [36]. However, these programs are often underfunded and lack the necessary infrastructure to be scaled up nationwide. Furthermore, interventions in urban areas face additional challenges, as the availability of processed foods and the sedentary nature of urban life make it difficult to achieve widespread behavioral change [37]. International and regional collaborations have also played a crucial role in addressing obesity in Bangladesh. The Obesity Policy Engagement Network (OPEN SEA) has facilitated cross-country dialogue and collaboration, allowing Bangladesh to learn from the experiences of neighboring Southeast Asian countries that have faced similar public health challenges [43]. However, despite the potential of such collaborations, Bangladesh still faces significant barriers to implementing effective obesity policies, including limited funding, competing public health priorities, and a lack of coordination between government agencies and international organizations [44]. Moving forward, the development of a national strategy that integrates both government-led and community-based interventions, supported by international expertise and funding, will be critical to effectively addressing the obesity epidemic in Bangladesh [45].

Gaps in the Literature and Future Directions

While a considerable amount of research has been conducted on the prevalence and health impacts of obesity in Bangladesh, several gaps in the literature remain. First, there is a lack of longitudinal studies that track the long-term effects of obesity interventions, making it difficult to evaluate the sustainability and effectiveness of current policies. Most studies focus on short-term outcomes, leaving policymakers with limited evidence on which to base long-term strategies [24]. There is also a scarcity of research on the cultural and social factors that influence obesity patterns in Bangladesh. While socioeconomic factors such as urbanization and dietary changes are well-documented, less attention has been paid to how cultural norms and traditional dietary practices contribute to or mitigate the rise in obesity. Additionally, there is a need for more region-specific research that examines the differences in obesity prevalence between urban and rural populations, as well as among different socioeconomic groups. Current studies often treat Bangladesh as a homogenous entity, overlooking the significant disparities in lifestyle, diet, and healthcare access that exist across regions and income levels [29]. Addressing these gaps will require more comprehensive data collection and analysis, as well as interdisciplinary research that incorporates insights from public health, economics, sociology, and nutrition. Future research should also focus on the development and evaluation of culturally tailored interventions that take into account the unique dietary and lifestyle patterns of Bangladeshi populations. For instance, promoting the consumption of traditional, nutrient-rich foods while reducing the intake of processed foods could form the basis of more effective obesity prevention strategies. Furthermore, the role of gender in obesity patterns—particularly the higher prevalence of obesity among women—needs to be better understood, as addressing gender-specific factors could improve the targeting of interventions [46]. Finally, more robust policy evaluations are needed to assess the effectiveness of government-led initiatives and international collaborations, ensuring that future interventions are grounded in evidence-based practices that are both scalable and sustainable.

DISCUSSION

The findings from this literature review highlight the alarming rise of obesity in Bangladesh, a trend that mirrors global and regional patterns while presenting unique challenges shaped by the country's socioeconomic transition. Obesity, now recognized as a leading risk factor for noncommunicable diseases (NCDs), has significant health, economic, and social implications in Bangladesh. As the country transitions from undernutrition to overnutrition, the double burden of malnutrition has created a complex public health scenario that requires urgent and multi-faceted interventions [26]. The growing prevalence of obesity in Bangladesh, particularly in urban areas, is closely linked to the nation's rapid urbanization and economic development, leading to lifestyle changes characterized by increased consumption of processed, calorie-dense foods and a decrease in physical activity [38]. These shifts are reflective of global trends, where economic growth and urbanization are key drivers of the obesity epidemic, particularly in low- and middle-income countries [29]. In a global context, the rapid increase in obesity rates over the past few decades has been driven by the widespread availability of cheap, processed foods and sedentary lifestyles, particularly in urban areas [23]. This pattern is evident in Bangladesh, where urban residents exhibit significantly higher rates of obesity compared to their rural counterparts [35]. While urbanization has brought economic opportunities, it has

also facilitated lifestyle changes that contribute to poor dietary choices and reduced physical activity, both of which are major contributors to obesity. In comparison, rural populations, while still experiencing lower rates of obesity, are not immune to these changes. As rural areas become more urbanized, their residents are increasingly exposed to the same risk factors, leading to a gradual rise in obesity rates [9,47]. This urban-rural divide in obesity prevalence is a critical factor that must be addressed in future public health policies. The health implications of obesity in Bangladesh are severe, particularly given its strong association with NCDs such as Type 2 diabetes, hypertension, and cardiovascular diseases. The increasing prevalence of these diseases has placed an immense burden on the country's already strained healthcare system. The literature highlights that over 40% of adults with Type 2 diabetes in Bangladesh have a BMI of 25 or higher, underscoring the significant correlation between obesity and diabetes [48]. In comparison with other Southeast Asian countries, Bangladesh faces similar challenges, as many of these nations are also grappling with the rising prevalence of obesity-related NCDs. However, the situation in Bangladesh is further complicated by its dual burden of undernutrition and obesity, which exacerbates health inequalities and places additional pressure on public health infrastructure [19]. Economic and social consequences of obesity are also profound, as the rising healthcare costs associated with treating obesity-related conditions strain both the public healthcare system and individual households [12]. Studies have shown that the economic burden of obesity in Bangladesh is steadily increasing, with healthcare expenditures linked to NCDs such as diabetes and cardiovascular diseases accounting for a growing share of national healthcare costs [40]. Socially, obesity contributes to reduced productivity and increased absenteeism, particularly among the working-age population, further exacerbating the economic impact of the epidemic [36]. Comparatively, other countries in the Southeast Asian region are facing similar economic challenges, but Bangladesh's lower-middle-income status makes these burdens particularly severe, as resources for healthcare and public health interventions are more limited [24]. Despite the severity of the problem, the policy responses to obesity in Bangladesh remain inadequate. While national health campaigns have raised awareness about the risks of obesity and promoted healthier lifestyles, these initiatives have yet to achieve widespread behavioral change [33]. Government-led interventions have largely focused on urban areas, where the obesity problem is most acute, but have not fully addressed the growing prevalence of obesity in rural populations [37]. In contrast, other Southeast Asian countries, such as Thailand and Malaysia, have implemented more comprehensive national strategies to tackle obesity, including school-based nutrition programs and taxes on sugary drinks. Bangladesh could benefit from adopting similar policies, particularly those that target high-risk populations and incentivize healthier dietary choices. Community-level interventions in Bangladesh, while promising, are often underfunded and lack the necessary infrastructure for nationwide implementation. Nutrition education programs and community-based physical activity initiatives have had some success in rural areas, but these efforts remain fragmented and poorly coordinated [29]. International collaborations, such as the Obesity Policy Engagement Network (OPEN SEA), have facilitated knowledge-sharing and provided a platform for Bangladesh to learn from other countries in the region. However, the impact of these collaborations has been limited by financial constraints and competing public health priorities, particularly the ongoing challenges posed by infectious diseases and undernutrition [43]. A key gap in the literature is the lack of longitudinal studies that track the long-term effectiveness of obesity interventions in Bangladesh. Most research to date has focused on short-term outcomes, which provides limited insights into the sustainability of these programs. Furthermore, there is a need for more research on the cultural and social determinants of obesity in Bangladesh, particularly how traditional diets and gender roles influence dietary behaviors and physical activity [49]. Addressing these gaps will be critical to developing more targeted and culturally appropriate interventions. Future research should also explore the role of regional collaboration in addressing the obesity epidemic, as shared experiences and resources among Southeast Asian nations could lead to more effective public health strategies. In conclusion, the rising concern of obesity in Bangladesh reflects broader global and regional trends but presents unique challenges shaped by the country's socioeconomic transition. The health, economic, and social consequences of obesity are severe, and while some interventions have been implemented, they remain insufficient to fully address the scale of the problem. A more comprehensive and coordinated approach is needed, one that integrates government-led policies, community-based initiatives, and international collaboration. As the country continues to develop, it will be critical to ensure that public health strategies are adaptable to both the urban and rural contexts and that they address the underlying drivers of obesity, including dietary changes and sedentary lifestyles.

CONCLUSION

The rising prevalence of obesity in Bangladesh, particularly in urban areas, reflects broader global and regional trends driven by socioeconomic transitions, urbanization, and changes in dietary patterns. Obesity in Bangladesh presents a dual burden alongside undernutrition, complicating public health efforts to address both extremes of the malnutrition spectrum. The health implications of obesity, including its strong association with noncommunicable diseases such as Type 2 diabetes, hypertension, and cardiovascular diseases, place significant strain on the healthcare system

and contribute to rising healthcare costs. While government initiatives and community-level interventions have been implemented, they remain insufficient in addressing the growing scale of the obesity epidemic. More comprehensive and coordinated strategies are needed, focusing on both prevention and treatment, supported by international collaboration and culturally appropriate interventions. Future efforts should address gaps in research, particularly regarding the long-term effectiveness of current interventions, and should aim to develop region-specific solutions that account for the unique cultural, economic, and social factors influencing obesity in Bangladesh.

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