

ORIGINAL ARTICLE

Health-Seeking Behavior of Self-Reported Diabetics: A Descriptive Study of Self-reported Diabetics Utilizing Public Parks

Shah Muhammad (MPH)¹ , Ghulam Mustafa (MSc)¹ , Suneel Kumar (MPhil)² , Sajid Bashir Soofi (FCPS)¹ 

1 Centre of Excellence in Women and Child Health, Aga Khan University, Karachi, Sindh, Pakistan

2 Department of Anthropology, University of Georgia, Athens, USA.

Corresponding author

Shah Muhammad

Centre of Excellence in Women and Child Health,

Aga Khan University, Karachi, Sindh, Pakistan.

shah.muhammad@aku.edu



ISSN: 3006-760X (Online)

Citation: Muhammad S., et al (2024). Health-Seeking Behavior of Self-Reported Diabetics: A Descriptive Study of Self-reported Diabetics Utilizing Public Parks December 25,1(4):15-23
DOI:

<https://doi.org/10.62807/jowach.v1i4.2024.15-23>

Available at: [Link](#)

Editor: Olusegun Adeoye.

Peer Review History: JOWACH recognizes the benefits of transparency in the peer review process; therefore, we keep all of the content of peer review and author responses in our repository. We do not have a hyperlink to publicly accessible peer-review history, but if needed, we



Copyright: ©2024 Mustafa G. et al (2024)

This is an open access article distributed under the terms of the **Creative Commons Attribution License**, and permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Data Availability Statement: All relevant data are within the manuscript. We do not have a hyperlink to publicly accessible archived datasets, but if needed, we can send the raw data to you.

Funding: No funding.

Competing interests: The authors have declared that no competing interests exist.



Abstract

Background

Diabetes mellitus, particularly type 2 diabetes, is a significant global health concern, especially in low- and middle-income countries like Bangladesh. The prevalence of diabetes among adults in Bangladesh rose from 3.9% in 2010 to 8.3% in 2018, projected to nearly double by 2045. Many diabetics manage their condition outside formal health systems, influenced by their knowledge of the disease, financial resources, and access to services. Exploring their health-seeking behaviors and healthcare networks is crucial but has been underexplored.

Methods

A qualitative exploratory study was conducted in two public parks, targeting self-identified diabetics aged 40 and older. Fifteen in-depth interviews were conducted with purposively selected self-reported diabetics and park healthcare providers using a semi-structured interview guide. Data was analyzed using a thematic content analysis approach.

Findings

Most participants were men aged 50-60 from high socioeconomic backgrounds, with good knowledge of diabetes risk factors and the need for lifestyle changes. Common risk factors included anxiety, with complications like sexual dysfunction frequently noted. Physicians were the primary information source, while BIRDEM was the preferred healthcare provider due to its reputation and cost-effectiveness. Many participants also utilized homeopathic and herbal treatments, with about one-third reporting complications such as uncontrolled blood sugar and cardiovascular issues. Lifestyle modifications included dietary changes, exercise, medication adherence, and spiritual support. Participants spent over 1,000 takas monthly on diabetes care, mainly accessing services from park providers, who had limited formal training.

Conclusion

This study explored health-seeking behaviors of self-reported diabetics, identifying key barriers such as gender disparities, financial constraints, and reliance on alternative treatments. It highlighted the need for better integration of informal healthcare providers, improved health education, and a more supportive healthcare environment. Further research on anxiety, sexual health, and gender-related barriers could help promote equity in diabetes prevention and management.

Keywords

Health-seeking Behavior, Diabetes, Qualitative Research, Healthcare Providers, Public Health, Developing Country, Sustainable Development Goals

Abstracts in [عربی](#), [اردو](#), [中國人](#), [française](#), [русский](#) and [español](#) at the end of the article

Layman Summary

This study explores how people with diabetes in Dhaka, Bangladesh, seek healthcare, particularly focusing on those who turn to public parks for health services. Diabetes, especially type 2, has become a significant health issue in Bangladesh, with prevalence rising sharply—from 3.9% in 2010 to 8.3% in 2018—and is projected to double by 2045. Many individuals manage their diabetes outside formal health systems, often influenced by their understanding of the disease, available financial resources, and access to various healthcare options.

Researchers conducted in-depth interviews with 15 self-reported diabetics and healthcare providers in two public parks. Majority of the male and female participants were aged 50-60 from higher socioeconomic backgrounds, demonstrating good awareness of diabetes risk factors and complications, such as cardiovascular issues and sexual dysfunction. They primarily sought information from physicians and favored BIRDEM, a reputable healthcare provider known for its affordability. Interestingly, many participants also explored alternative treatments, including homeopathy and herbal remedies, reflecting a broader trend in seeking complementary care alongside conventional medicine.

Despite their knowledge, participants faced several challenges in effectively managing their diabetes. Financial constraints often limited their access to necessary treatments, and there was a notable lack of training among healthcare providers in these informal settings. While participants recognized the importance of lifestyle changes – like healthier diets and regular exercise – some struggled to maintain these changes, particularly during Ramadan when dietary practices shift.

The study found that socio-cultural factors restrict women's access to physical activities, particularly in mixed-gender settings. The study also highlighted significant gender disparities, revealing that women are less likely to be diagnosed with diabetes and less inclined to seek specialized care compared to men. This points to a need for gender-sensitive approaches in diabetes management.

The researchers emphasize the urgent need for a comprehensive healthcare system that not only enhances community support but also integrates informal healthcare providers into the formal system. Addressing the socioeconomic and gender-related barriers to care is crucial for improving health outcomes. They also recommend further research into related health issues, such as anxiety and sexual health, to better understand the complexities of diabetes management in Bangladesh and similar contexts. By focusing on education and access, the study aims to inform strategies for more effective diabetes care within the community.

INTRODUCTION

Chronic diseases, including cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes, are the leading causes of mortality globally. These diseases account for approximately 60% of all deaths worldwide [1]. The burden of chronic diseases is particularly pronounced in low- and middle-income countries (LMICs), where 80% of chronic disease deaths occur [2].

The epidemiological transition in developing countries is characterized by a shift from infectious diseases to chronic diseases. This transition is driven by factors such as urbanization, aging populations, sedentary lifestyles, unhealthy diets, and insufficient physical activity [2]. Chronic diseases not only lead to high mortality rates but also contribute significantly to morbidity, disability, and economic burden [3].

Diabetes is a rapidly growing health problem in LMICs. The prevalence of diabetes has been rising more rapidly in these regions compared to high-income countries [4]. In 2014, the number of people with diabetes globally was 422 million, up from 108 million in 1980 [4]. By 2045, it is projected that 783 million adults will be living with diabetes, with three-quarters of these cases in LMICs [5].

The economic burden of diabetes is substantial. The annual cost of diabetes treatment globally is estimated to be as high as US\$825 billion [6]. In LMICs, the costs are primarily borne by individuals through out-of-pocket payments, leading to significant financial hardship [6]. This economic strain affects productivity and hampers economic development [6].

Health systems in LMICs face significant challenges in addressing diabetes. These include a lack of reliable epidemiological data, insufficient national strategies, a shortage of trained healthcare personnel, and limited financial resources [1]. Effective surveillance and a robust healthcare infrastructure are critical for the prevention and control of diabetes [1].

Background

Diabetes mellitus, particularly type 2 diabetes, is a growing public health concern globally, with a significant burden in low- and middle-income countries like Bangladesh. The prevalence of diabetes in Bangladesh has been steadily increasing over the past decades. According to recent studies, the prevalence of diabetes among adults aged 18-69 years rose from 3.9% in 2010 to 8.3% in 2018 [7]. This increase is attributed to factors such as urbanization, lifestyle changes, and genetic predisposition [8]. The International Diabetes Federation estimates that approximately 8.4 million adults in Bangladesh had diabetes in 2019, a figure projected to

nearly double to 15 million by 2045 [9]. This trend highlights the urgent need for effective management and prevention strategies, compounded by socioeconomic disparities, limited healthcare access, and low disease awareness [7].

Diabetes is a chronic condition marked by elevated blood glucose levels, leading to severe complications if unmanaged. Understanding the health-seeking behavior of self-reported diabetics – those diagnosed and aware of their condition – is crucial for developing targeted interventions. Health-seeking behavior encompasses the actions taken by individuals to maintain health, prevent illness, and seek treatment when necessary [10].

RATIONALE

Despite the growing body of research on health-seeking behavior [11, 12], there is limited exploration of health-seeking behaviors related to chronic illnesses, particularly diabetes, in Bangladesh. Factors influencing these behaviors include past healthcare experiences, availability of alternative providers, and perceptions of care quality [13]. Studies suggest that men are more likely to utilize healthcare services than women, especially when costs are low [14]. However, these findings may not reflect the behaviors of those seeking care outside formal settings. Limited access to formal healthcare and the costs associated with specialized care often led patients to alternative health-seeking options [15].

Several studies have suggested that diabetes is disproportionately affecting disadvantaged and vulnerable populations, but these findings are often general and lack nuanced exploration of the intersectionality of gender, socioeconomic status, and cultural contexts [16, 17].

In many LMICs, including Bangladesh, gender plays a pivotal role in shaping health-seeking behaviors. Previous research has highlighted that men are often more likely to seek healthcare services than women, particularly when healthcare costs are subsidized or when they have the financial resources to access formal healthcare systems [14]. Gendered social norms and household roles contribute significantly to these disparities. In patriarchal societies, women may prioritize family care over their own health needs, or may have limited autonomy to seek care independently, especially for chronic conditions like diabetes [18]. Studies indicate that women are more likely to face significant barriers to accessing healthcare, such as lower decision-making power, lower economic resources, and cultural restrictions [19]. These factors are compounded in rural or less urbanized areas, where healthcare infrastructure is limited, and gender norms

restrict mobility and the ability to engage in health-seeking behaviors [20].

Socioeconomic status (SES) is another important factor influencing health-seeking behaviors, with individuals from lower socioeconomic backgrounds facing greater challenges in accessing healthcare. In Bangladesh, as in many LMICs, diabetes care often requires expensive medications, specialized consultations, and regular monitoring, which are unaffordable for many low-income individuals [21]. Financial barriers exacerbate gender disparities, as women, particularly from marginalized groups, may lack the economic autonomy to prioritize their healthcare needs.

Research indicates that the burden of diabetes treatment often falls disproportionately on women in low-income households, where they are more likely to forego their own treatment in favor of supporting family members [22]. Furthermore, individuals from lower SES backgrounds are more likely to seek healthcare outside the formal system, relying on traditional medicine or informal care providers. This has significant implications for diabetes management, as such care may be less effective or inconsistent with medical guidelines [23].

A critical factor that is often overlooked in health-seeking behavior research is the cultural perception of chronic diseases like diabetes. In many LMICs, including Bangladesh, there is still limited awareness and stigma associated with diabetes, which can influence health-seeking behavior. In some cases, diabetes may be perceived as a "wealthy person's disease," leading individuals from lower socioeconomic backgrounds to delay seeking care until complications arise [24].

Gendered perceptions also play a role, with women often facing additional stigma if they are diagnosed with chronic diseases like diabetes, which are associated with poor health behaviors such as overeating or lack of exercise [25]. These cultural perceptions can delay diagnosis and treatment initiation, contributing to worse health outcomes for both men and women, but especially for women who face compounded social and cultural barriers.

The growing prevalence of diabetes in LMICs, particularly in Bangladesh, necessitates a deeper understanding of the factors influencing health-seeking behaviors. Previous research has underscored the importance of gender and socioeconomic disparities, but there is a need for more critical examination of these factors in the context of diabetes care. As the burden of diabetes continues to rise, particularly among vulnerable populations, addressing the complex interplay of gender, economic status, and healthcare access is essential for designing effective public health interventions and improving diabetes management strategies. This study seeks to fill this gap by exploring the health-seeking behaviors of individuals with diabetes in Dhaka's public parks, focusing on gendered and socio-economic disparities, and generating actionable insights to inform public health policy and interventions.

MATERIALS AND METHODS

Study Design, Methods, and Tools

This study utilized a qualitative descriptive exploratory design, employing in-depth interviews (IDIs) for data collection. Separate semi-structured interview guides were created for self-reported diabetics and park-based healthcare providers, with initial drafts informed by a comprehensive literature review. Pilot testing and subsequent revisions ensured the guides were contextually relevant before translation into Bangla for data collection. The guides covered socio-demographic characteristics, disease knowledge, health-seeking behavior, and services received in the parks. Two research assistants, one male and one female, were recruited to assist with tool development, piloting, and translation, ensuring a clear understanding of the study objectives.

Study Setting

The research was conducted in two public parks in Dhaka, Bangladesh. The parks were selected to reflect distinct socio-demographic profiles:

1. **Dhoni Park (proxy name):** Located in a high-income area, featuring an 840-meter jogging track (personal communication with caretaker).

2. **Daridro Park (proxy name):** Situated in an older part of Dhaka with a 150-meter walking track, frequented by low-income individuals for exercise and social interaction.

Study Population

The study population consisted of individuals (both males and females) aged 40 and above, who self-reported as diabetic, and attending Dhoni and Daridro parks during peak hours (6-9 am and 4-7 pm). Additionally, all park-based health care providers who offered services at least once a week were included. Preliminary visits to the parks revealed variability in services provided by healthcare providers on different days.

Sampling

A purposive sampling approach was employed to recruit study participants, specifically targeting self-reported diabetics and healthcare providers at the parks for IDIs. A screening tool was used to ensure a diverse range of perspectives based on age, socioeconomic status, occupation, education, and duration since diagnosis. On the first day of data collection, joggers at park entrances were approached during designated hours to collect basic screening information. Selected respondents were then invited to participate, resulting in a total of 12 IDIs (6 from each park) with diabetics, along with three IDIs conducted with healthcare providers. In total, 15 IDIs were carried out across two public parks in Dhaka: Dhoni Park (representing a high socioeconomic class) and Daridro Park (representing a low socioeconomic class).

Eligibility Criteria

The study included park attendees who met specific eligibility criteria. Participants who self-identified as diabetic, were aged 40 years and older, and providing informed consent were included in the study. Healthcare providers were included if they were active in the selected parks and available at least one day per week.

Objectives

General study objective

To explore the health-seeking behavior, knowledge, and healthcare networks of self-reported diabetics utilizing public parks in Dhaka for diabetes management.

Specific study objectives

1. To describe the treatment-seeking pathways of self-reported diabetics using Dhaka parks.
2. To identify and characterize the various service providers, services offered, and referral networks in the parks.
3. To assess knowledge regarding diabetes and its management among self-reported diabetic park users.

Baises and Confounders

To address biases in this qualitative research, several strategies were implemented throughout the study. Purposive sampling was used to select self-reported diabetics from public parks in Dhaka, ensuring a diverse range of perspectives based on criteria like age, gender, and socioeconomic status. This approach aimed to minimize selection bias by capturing varied experiences in diabetes management.

Data collection involved semi-structured interviews, allowing for consistent yet open-ended discussions that reduced interviewer bias. Multiple researchers participated in gathering data, which helped cross-validate responses and limit individual bias. Thematic

content analysis was conducted, with independent researchers reviewing findings to ensure interpretations were well-grounded in the data. By triangulating insights and reflecting on potential biases, the team aimed to enhance the credibility and reliability of the research, leading to a deeper understanding of health-seeking behaviors among diabetics.

Data Collection

The study was conducted from October 1 to December 3, 2008, with data collection occurring from October 10 to 30 (20 days).

Quality Control Measures

Quality control measures in this qualitative research study included several key strategies to ensure the integrity of the findings. A detailed interview guide was developed and pilot-tested to refine questions, while multiple trained researchers conducted the interviews to maintain consistency and minimize bias. Audio recordings were used to accurately capture responses. Thematic analysis involved systematic coding, with regular team meetings to discuss emerging themes and address interpretation discrepancies. Additionally, member checking allowed participants to review and provide feedback on the findings, further validating the researchers' interpretations. These measures enhanced the study's rigor and credibility.

Data Analysis

The qualitative data analysis used manual thematic content analysis. Verbatim transcripts were prepared promptly to identify data gaps and insights. Codes and sub-codes were developed inductively, grouped under pre-determined themes like knowledge and health-seeking behavior. Triangulation was used to validate findings, including cross-checking themes with literature and consulting a second researcher. Biases were mitigated through diverse participant sampling, reflexivity, and an audit trail to ensure transparency. Member checking with participants was also conducted to validate themes. This rigorous process ensured a reliable and nuanced understanding of the data.

Ethical Considerations

The study received ethical approval from the Institutional Review Board of the James P. Grant School of Public Health at BRAC University (IRB Reference No. 2008-001-IR). Informed consent was provided to participants in Bangla, clearly explaining the study's objectives and their rights. Participation was entirely voluntary, and confidentiality was maintained throughout the research. Oral consent was obtained, and audio recorded as part of the interviews. No personal identifiable information was collected, and all personal identifiers were removed from transcripts prior to data analysis.

FINDINGS

The qualitative findings are organized into three main themes. The first section outlines the socio-demographic characteristics of self-reported diabetics. The second explores their knowledge of diabetes –covering signs, symptoms, complications, and information sources – along with their health-seeking behaviors, influencing factors, and alternative care practices. The third section presents the experiences and perspectives of healthcare providers.

Socio-demographic Characteristics

The study included self-reported diabetics from two public parks: Dhoni and Daridro. The sample was predominantly male, with participants aged between 49 and 70 years; most women were from Dhoni Park. Of the twelve participants, nine had a college education or higher, with Dhoni Park participants generally being more educated. Employment varied by gender: all women were housewives, while most men were involved in business, particularly import-export and retail. In terms of income, the majority earned over 25,000 taka per month, with a few earning between 10,000 and 25,000 taka. One participant reported an income of 10,000 taka.

Three participants from Dhoni Park did not disclose their income, while those from Daridro Park reported lower earnings overall. Three participants had a family history of diabetes among first-degree relatives. A detailed breakdown of the socio-demographic characteristics is provided in Table 1.

Table 1: Socio-demographic Characteristics of the Self-Reported Diabetics Participating in the Study

Variable	Categories	N (12)
Age	50 - 59	8
	60 - 69	3
	70 and above	1
Sex	Male	08
	Female	04
Educational Status	Primary	01
	Secondary	02
	College and above	09
Occupation	Housewife	04
	Private employee	01
	Business(enterprise)	03
	Shopkeeper	02
	Retired	01
Monthly Income (Estimate)	6001 to 10,000	01
	10,001 to 20,000	04
	20,001 to 50,000	04
	No Response	03
	Family history of diabetes	Yes
	No	08
	Don't Know	01

PERSPECTIVES OF SELF-REPORTED DIABETICS

Knowledge about Signs, Symptoms, Risk Factors, and Complications :

Participants recognized various demographic groups at risk for diabetes, including both young and old. While many identified aging as a significant risk factor, others believed that both age groups are equally vulnerable. One participant from Daridro Park noted, "Old age is the home of diseases." There was consensus that diabetes affects both men and women equally, though urban residents perceived rural populations as more at risk due to lower awareness. As a Dhoni Park participant explained, "Rural people are more at risk because of limited education about diet and health." The main risk factors identified included age, family history, obesity, poor diet, sedentary lifestyles, and psychological stressors like anxiety and financial strain. One participant commented on the changing quality of food, saying, "The vegetables we eat aren't natural anymore; the excess fertilizers and pesticides feel like poisons." Physical inactivity, especially in urban settings, was another major concern. A participant remarked, "In cities, we walk less and rely more on cars and motorcycles, contributing to the rise of diabetes." Regarding symptoms, participants commonly reported weakness, increased thirst, frequent urination, and weight loss, with urinary symptoms often prompting medical consultations. One participant said, "Frequent urination and weakness are clear signs; you should check your blood sugar." Most participants were aware of diabetes complications, such as organ damage and sexual dysfunction. Participants from Dhoni Park more frequently mentioned sexual complications, while those from Daridro Park highlighted metabolic issues. One participant shared, "Having diabetes feels like losing health gradually; uncontrolled diabetes leads to severe complications."

Knowledge about Lifestyle Changes

Most participants acknowledged the importance of lifestyle changes in preventing or managing diabetes, with an emphasis on healthy eating and regular physical activity. One participant noted, "Once a lifestyle is properly changed and maintained, diabetes can be managed effectively." However, some individuals with a family history of diabetes were skeptical about prevention, believing the condition to be inevitable.

Sources of Information

Participants obtained diabetes-related information from various sources, with healthcare providers being the most frequently cited. Those from Dhoni Park also accessed information through the internet and health magazines. One participant shared, "I get information from doctors and friends, and also read articles my sister sends me from the internet."

Health-Seeking Behavior

Participants reported diverse experiences with health-seeking behavior. Many identified early symptoms such as weakness, excessive thirst, and breathlessness. One female participant from Dhoni Park recalled, "I felt excessively thirsty and fatigued, which led me to visit the doctor." Others, such as a 53-year-old housewife, were diagnosed during routine check-ups despite feeling healthy: "During my second pregnancy, routine checks revealed I had diabetes, though I felt fine." Upon diagnosis, reactions varied. Most expressed shock and fear, especially concerning lifestyle changes. One female participant said, "I was terrified. Diabetes isn't like a cold, it's a chronic condition that changes your life." Another participant, however, was more indifferent, thinking the condition would be manageable: "I didn't realize how severe diabetes was. I thought it would be easily managed."

Factors Influencing Healthcare Provider Choice

Participants typically chose healthcare providers based on reputation, specialization in diabetes care, and convenience. Many initially sought care from familiar providers for other health issues. BIRDEM (Bangladesh Institute of Research and Rehabilitation for Diabetes, Endocrine, and Metabolic Disorders) was frequently mentioned, with one female participant from Dhoni Park stating, "I continued my treatment with my obstetrician, who prescribed diabetes medications."

Cost was less of a concern when specialized care was needed. One participant explained, "When it comes to serious illness, money is less of a concern." Some participants, particularly from Dhoni Park, sought care abroad, prioritizing quality over cost. Others, particularly from Daridro Park, preferred BIRDEM due to its reputation.

Experience of Diabetic Complications

While most participants reported no complications, those who did experienced issues such as uncontrolled blood sugar, unconsciousness, and hospitalizations. Participants from Daridro Park reported more severe complications, including heart, dental, and eye problems, while Dhoni Park participants mainly mentioned psychological challenges like anxiety and irritability. One female participant shared, "I feel tense about my health and constantly anxious about my blood sugar... I become short-tempered because of diabetes." Sexual health issues were more frequently reported in Dhoni Park, with one male participant stating, "Diabetes brings many limitations, including sexual problems, which affect your psychological well-being."

Lifestyle Changes Adopted

After diagnosis, participants made significant changes to their diet and exercise routines. Many found it challenging to maintain these changes during Ramadan, a month of fasting. One male participant from Dhoni Park shared, "I've drastically reduced sugar intake and exercise regularly. It's now part of my routine." However, a female participant noted the difficulties during Ramadan: "It's hard to resist certain foods, and my blood sugar often spikes."

Experience with Park Healthcare Services and Cost

Most participants from both parks reported using healthcare services, such as blood pressure and blood sugar checks, with some relying on these providers for diabetes management. A 50-year-old businessman shared, "I jog here regularly and check my blood sugar. The provider keeps detailed records, making it easy to track

fluctuations." However, some individuals were skeptical about the accuracy of the tests and chose not to engage.

There were notable differences in the cost of diabetic care between the two groups. Participants typically spent between 500 to 1,000 taka per month on consultations and medications. Those from Daridro Park expressed concern about the financial burden of ongoing treatment. One participant noted, "My expenses were manageable at first, but now that I'm using insulin, it has risen to nearly 1,000 taka per month." Some from Dhoni Park sought treatment abroad, spending substantial amounts for care in countries like Bangkok and Singapore. Conversely, some from Daridro Park struggled with even modest expenses. One participant said, "Even 500 to 1,000 taka is too much for me, so I try to manage my diabetes through exercise and diet control."

Alternative Care-Seeking Practices

Many participants also used alternative treatments, such as home remedies and herbal medicines, either from informal care providers or through family and media recommendations. One female participant shared, "I started using home-made treatments like Methi (fenugreek), which is known for its benefits for diabetes." Another male participant spoke positively about homeopathy: "I used *Syzygium* and *Jambolium Q* for about five years and felt positive effects." However, some expressed skepticism about alternative remedies. One male participant said, "I've tried several herbal remedies, but noticed no improvement." Overall, experiences with alternative care varied widely among participants.

PERSPECTIVES OF HEALTHCARE PROVIDERS

Profile of the Healthcare Providers

Three healthcare providers were interviewed: one female from Dhoni Park and two males from Daridro Park. The female provider, aged 45, holds a B. Com degree, making her the most educated, while the male providers have only completed matriculation. Their experience ranges from two to eight years. The provider in Dhoni Park works two daily shifts, while the Daridro Park providers work only in the mornings, with one available just twice a week. Provider incomes range from 200 to 800 taka daily. All are affiliated with larger companies that supply medical instruments and health products, and they report satisfaction with both their earnings and the training opportunities offered. As one provider shared, "I started my service in January 2007 after a friend introduced me to the park caretaker," while another explained, "I learned to use a glucometer while working at DEF Ltd., then began offering health checks after I was let go."

Healthcare Providers' Knowledge About Diabetes

All providers demonstrated basic knowledge of diabetes symptoms, such as weakness and frequent urination, but acknowledged their limitations in managing complications. One provider noted, "I know the major complications of uncontrolled diabetes, but I don't treat them directly."

Services Provided, Type of Clients, and Service Charges

The providers offer basic health checks (blood sugar and pressure), as well as herbal medicines. Prices for these services range from 40 to 70 taka, with each provider seeing 20 to 30 clients daily. One provider remarked, "I don't have holidays because people rely on me for their sugar control." While diabetes and hypertension are their primary focus, providers also offer home visits and plan to introduce blood group testing. They promote certain health products, such as black seed oil, highlighting its benefits. The majority of clients are male, influenced by cultural factors. As one provider stated, "Most of my clients are men; women often prefer not to exercise in mixed company."

Referrals to Other Healthcare Providers

Although they do not have formal connections with hospitals, providers refer clients to local healthcare facilities in emergencies.

The Daridro Park providers typically refer clients to BIRDEM for diabetic care, while those from Dhoni Park recommend private hospitals for more specialized treatment.

DISCUSSION

This study explores the health-seeking behavior of self-reported diabetics in Bangladesh, revealing how factors such as socioeconomic status, access to healthcare, and cultural beliefs shape their diabetes management and care. The findings resonate with broader research on diabetes in low- and middle-income countries (LMICs), where these same factors play a critical role in health outcomes.

Gender and Diabetes Prevalence

Most study participants were men, despite evidence showing that women in Bangladesh are disproportionately affected by diabetes (26). This gender imbalance in our sample is consistent with the male-dominated societal structure and cultural norms that restrict women's physical activity, particularly in mixed-gender settings [27]. Similar gender disparities in diabetes prevalence and care-seeking behavior have been documented in other LMICs, where men often dominate health studies, while women face barriers to accessing care due to social constraints, lower literacy, and cultural expectations [28]. This highlights a significant gap in addressing women's health needs in diabetes management, suggesting the need for gender-sensitive approaches in public health interventions.

Knowledge of Diabetes

Our participants demonstrated significant awareness of diabetes risk factors, including age, family history, and lifestyle choices. This aligns with existing studies that emphasize the importance of public health campaigns to improve awareness of modifiable risk factors for diabetes (Kahn et al., 2005) [28]. However, while most participants recognized key symptoms like weakness, excessive thirst, and frequent urination, our findings suggest that knowledge of long-term complications, such as organ damage, was less consistent among those from lower-income areas like Daridro Park. This is consistent with Rahman et al. (2016), who found that while individuals are generally aware of the symptoms of diabetes, education on its complications remains insufficient in rural and underserved populations [30]. This gap in knowledge may limit individuals' ability to manage their condition effectively over the long term, underscoring the need for comprehensive diabetes education that includes both acute symptoms and chronic complications.

Health-Seeking Behavior

Participants' health-seeking behavior reflected a clear preference for medical consultation upon experiencing symptoms. Many reported shock upon diagnosis, a finding in line with Bowers et al. (2005), which suggests that emotional responses to a new diagnosis can significantly impact the trajectory of disease management [31]. While participants sought formal care, many also engaged in alternative therapies, a trend that mirrors global findings on the use of complementary medicine in diabetes care. O'Brien et al. (2005) found that dissatisfaction with conventional care and cultural beliefs often drive individuals in both rural and urban settings to explore alternative treatments, including herbal remedies and homeopathy [32, 33]. Our study highlights the need to integrate these alternative practices with formal care pathways to provide holistic and culturally acceptable solutions for diabetes management.

The preference for established institutions like BIRDEM also echoes findings from Hossain et al. (2015), who emphasized the role of reputable healthcare facilities in providing quality care for chronic conditions such as diabetes. In particular, BIRDEM's reputation and accessibility are crucial in a context where specialized care is often limited. However, the lack of a formal referral mechanism identified in our study aligns with concerns raised by Ghosh et al. (2019), who noted that healthcare providers in LMICs often lack the training and

resources necessary to manage complex chronic diseases, resulting in suboptimal care for diabetes patients [34]. The need for a more structured referral system is further supported by WHO guidelines, which stress the importance of improving healthcare training and strengthening referral networks for chronic disease management (1).

Lifestyle Changes and Challenges

The study also explored participants' efforts to manage their diabetes through lifestyle modifications. While most participants understood the importance of a healthy diet, physical activity, and weight management, the challenges of maintaining these changes, particularly during Ramadan, were prominent. Fasting during Ramadan has long been recognized as a complicating factor in diabetes management. Studies have shown that fasting can exacerbate blood sugar fluctuations and increase the risk of complications [35]. Our findings confirm these concerns, emphasizing the need for tailored advice and careful monitoring of blood glucose during Ramadan. Health interventions that address these challenges are critical for effective diabetes management in Muslim-majority countries like Bangladesh.

Financial Barriers to Care

A major theme emerging from our findings is the financial burden of diabetes care. Participants from Daridro Park, in particular, expressed concerns over the high costs of treatment, consistent with the World Health Organization (2016) report on how out-of-pocket costs in LMICs can exacerbate health disparities and limit access to care [36]. On the other hand, participants from Dhoni Park, who had higher income levels, were more likely to seek care abroad, indicating a perceived disparity in the quality of local healthcare. This mirrors findings from studies in other LMICs, where higher-income individuals tend to seek care in private or international healthcare settings, further exacerbating inequalities in access to quality care [37].

Gender and Health-Seeking Behavior

Gender disparities in health-seeking behavior were also evident, with women in our study less likely to seek specialized care compared to men. This mirrors findings from several studies, including those by Kumar et al. (2020), which highlight the gendered barriers to diabetes care, particularly in rural and low-income contexts [10]. Women's lower participation in the workforce and cultural norms that restrict their mobility contribute to delayed diagnoses and treatment. These disparities call for more targeted interventions that address the unique challenges faced by women in accessing timely and effective diabetes care.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study contributes to the growing body of research on diabetes management in Bangladesh and other low- and middle-income countries (LMICs), highlighting the complex relationship between socioeconomic factors, cultural beliefs, and healthcare access. Our findings emphasize the need for a comprehensive approach to diabetes care that addresses both clinical and social determinants of health. They also call for enhancing the capacity of local healthcare providers through training, improving referral systems, and reducing financial and gender-related barriers to care. Population-level interventions focused on diabetes awareness, healthy lifestyle promotion, and culturally appropriate care are crucial for improving long-term health outcomes. Additionally, the widespread use of alternative treatments suggests the importance of integrating these therapies into formal healthcare systems for better diabetes management. Finally, the study identifies key areas for future research, including the exploration of anxiety, sexual health, and the barriers that prevent women from utilizing public spaces for diabetes management.

Recommendations

1. Integrate Informal Providers: Develop strategies to incorporate informal healthcare providers operating in public spaces into the formal healthcare system to improve accessibility and continuity of care.

2. Enhance Training: Provide targeted training for healthcare providers, particularly those in informal settings, to equip them with the necessary skills and knowledge for effective diabetes management.

3. Promote Gender-Sensitive Approaches: Implement health interventions that specifically address the barriers faced by women in diabetes diagnosis and care-seeking, ensuring equal access to resources.

4. Increase Health Education: Launch community-based educational programs focused on diabetes awareness, risk factors, and management strategies to empower individuals in making informed health decisions.

5. Financial Support Initiatives: Explore options for financial assistance or subsidized care for individuals facing economic hardships, ensuring that cost does not prevent access to essential diabetes management services.

6. Further Research: Future studies should explore health issues such as anxiety and sexual health in diabetics, as well as the barriers preventing women from using public spaces for diabetes management. This would help develop comprehensive support services tailored to their specific needs.

By implementing these recommendations, stakeholders can significantly improve diabetes management and health outcomes for affected individuals in Bangladesh and similar developing countries.

LIMITATIONS

This study highlights a fortunate subset of individuals who were diagnosed early, received appropriate treatment, and possessed a solid understanding of their condition. They represent only the tip of the diabetes epidemic iceberg. Larger studies with diverse samples of diabetic population may not only validate the findings of this study but also expand the understanding surrounding diabetes in developing countries that largely bear the burden of the disease.

ACKNOWLEDGMENT

The authors sincerely thank all study participants for their time, patience, and invaluable contributions to this research.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS CONTRIBUTIONS

Conceptualization: Shah Muhammad.

Data curation: Shah Muhammad, Ghulam Mustafa.

Formal analysis: Shah Muhammad, Ghulam Mustafa, Suneel Kumar.

Funding acquisition: No external funding involved.

Software: The data was analyzed manually.

Writing – original draft: Shah Muhammad, Ghulam Mustafa, Suneel Kumar.

Writing – review & editing: Shah Muhammad, Ghulam Mustafa, Suneel Kumar, Sajid Bashir Soofi.

Supervision: Shah Muhammad

Validation: Shah Muhammad, Ghulam Mustafa, Suneel Kumar, Sajid Bashir Soofi.

Multi-Lingual Abstracts

Abstract in عربی (Arabic)

ملخص
الخلفية

مرض السكري، وخاصة النوع الثاني، هو مشكلة صحية عالمية متزايدة، حيث ارتفعت نسبة انتشاره في بنغلاديش من 3.9% في عام 2010 إلى 8.3% في عام 2018، ومن المتوقع أن تتضاعف تقريبًا بحلول عام 2045. يدبر العديد من الأفراد مرض السكري خارج الأنظمة الصحية الرسمية، متأثرين بمعرفتهم، ومواردهم المالية، وإمكانية الوصول إلى الرعاية الصحية. استكشاف سلوكيات البحث عن الرعاية الصحية وشبكات الرعاية الصحية أمر بالغ الأهمية ولكنه غير مستكشف بشكل كافٍ. تهدف هذه الدراسة إلى تقييم سلوكيات البحث عن الرعاية الصحية، والمعرفة، وشبكات الرعاية الصحية لمرضى السكري الذين أبلغوا عن أنفسهم في حدائق دكا العامة لتقديم توصيات لاستراتيجيات تحسين الإدارة.

الطرق

تم إجراء دراسة استكشافية نوعية في حديقتين عامتين، تستهدف مرضى السكري الذين يحددون أنفسهم والذين تتراوح أعمارهم بين 40 عامًا وما فوق. تم إجراء خمسة عشر مقابلة متعمقة مع مرضى السكري ومقدمي الرعاية الصحية في الحديقة باستخدام دليل شبه منظم. تم تحليل البيانات باستخدام تحليل المحتوى الموضوعي.

التائج

المشاركون، وهم في الغالب رجال تتراوح أعمارهم بين 50-60 عامًا من خلفيات اجتماعية واقتصادية مرتفعة، كانوا على دراية جيدة بعوامل خطر مرض السكري، مثل القلق، وأدركوا أهمية التغييرات في نمط الحياة. شملت المضاعفات الاضطرابات الجنسية ومشاكل القلب والأوعية الدموية. كان الأطباء المصدر الرئيسي للمعلومات، وفضل المشاركون مستشفى BIRDEM بسبب سمعتها وأسعارها المعقولة. بعض المشاركين استخدموا العلاجات المثلية والعشبية. تجاوزت تكاليف رعاية مرضى السكري الشهرية 1000 টাকা. حيث لعب مقدمو الرعاية في الحدائق، الذين غالبًا ما يفكرون إلى التدريب الرسمي، دورًا رئيسيًا. شملت التعديلات في نمط الحياة النظام الغذائي، وممارسة التمارين الرياضية، والالتزام بالأدوية، والدعم الروحي.

الخاتمة

تشمل الحواجز الرئيسية الفجوات بين الجنسين، والقيود المالية، والاعتماد على العلاجات البديلة. دمج مقدمي الرعاية غير الرسميين، وتعزيز التثقيف الصحي، ومعالجة القلق، والصحة الجنسية، والحواجز المتعلقة بالنوع الاجتماعي يمكن أن يحسن إدارة مرض السكري والمسؤولية.

الكلمات المفتاحية

السلوك الصحي، السكري، البحث النوعي، مقدمو الرعاية الصحية، الصحة العامة، الدول النامية، أهداف التنمية المستدامة

Abstract in اردو (Urdu)

خلاصہ

تجربیدی پس منظر

ذیابیطس میلیٹس، خاص طور پر ٹائپ 2 ذیابیطس، صحت کی ایک بڑھتی ہوئی عالمی تشویش ہے، بنگلہ دیش میں اس کا پھیلاؤ 2010 میں 3.9 فیصد سے بڑھ کر 2018 میں 8.3 فیصد ہو گیا ہے، اور 2045 تک تقریباً دگنا ہونے کا امکان ہے۔ بہت سے افراد اپنے علم، مالی وسائل اور دیکھ بھال تک رسائی سے متاثر ہو کر باضابطہ صحت کے نظام سے باہر ذیابیطس کا انتظام کرتے ہیں۔ صحت کی تلاش کے طرز عمل اور صحت کی دیکھ بھال کے نیٹ ورک کو تلاش کرنا اہم ہے لیکن غیر دریافت شدہ ہے۔ اس مطالعہ کا مقصد ڈھانچے کے عوامی پارکوں میں خود رپورٹ شدہ ذیابیطس کے مریضوں کے صحت کی تلاش کے طرز عمل، علم اور صحت کی دیکھ بھال کے نیٹ ورک کا جائزہ لینا ہے تاکہ بہتر انتظام کے لیے حکمت عملیوں کی سفارش کی جا سکے۔

طریقے

دو عوامی پارکوں میں ایک معیاری تحقیقی مطالعہ کیا گیا، جس میں 40 سال اور اس سے زیادہ عمر کے خود شناخت شدہ ذیابیطس کے مریضوں کو نشانہ بنایا گیا۔ نیم ساختہ گائیڈ کا استعمال کرتے ہوئے ذیابیطس کے مریضوں اور پارک کے صحت کی دیکھ بھال فراہم کرنے والوں کے ساتھ پندرہ گہرائی سے انٹرویو کیے گئے۔ موضوعاتی مواد کے تجزیے کا استعمال کرتے ہوئے ڈیٹا کا تجزیہ کیا گیا۔

نتائج

شرکاء، بنیادی طور پر اعلیٰ سماجی و اقتصادی پس منظر سے تعلق رکھنے والے 50-60 سال کی عمر کے مرد، ذیابیطس کے خطرے کے عوامل، جیسے اضطراب، اور طرز زندگی میں تبدیلیوں کی اہمیت کو تسلیم کرتے ہیں۔ پیچیدگیوں میں جنسی بیماری اور قلبی امراض شامل تھے۔ معالجین معلومات کا بنیادی ذریعہ تھے، اور بیڈٹیم کو اس کی سادگی اور استطاعت کی وجہ سے ترجیح دی جاتی تھی۔ کچھ شرکاء نے بومیوپیٹھک اور جڑی بوٹیوں کے علاج کا استعمال کیا۔ ماہانہ ذیابیطس کی دیکھ بھال کے اخراجات 1,000 ٹکا سے تجاوز کر گئے، پارک فراہم کرنے والوں کے ساتھ، اکثر رسمی تربیت کا فقدان، کلیدی کردار ادا کرتا ہے۔ طرز زندگی میں تبدیلیوں میں غذا، ورزش، ادویات کی پابندی اور روحانی مدد شامل تھی۔

نتیجہ

اہم رکاوٹوں میں صنفی عدم مساوات، مالی رکاوٹیں، اور متبادل علاج پر انحصار شامل ہیں۔ غیر رسمی فراہم کنندگان کو مربوط کرنا، صحت کی تعلیم کو بڑھانا، اور اضطراب، جنسی صحت اور صنفی رکاوٹوں کو دور کرنا ذیابیطس کے انتظام اور مساوات کو بہتر بنا سکتا ہے۔

کلیدی الفاظ: صحت کی تلاش کا طرز عمل، ذیابیطس، کوالٹی ریسرچ، صحت کی دیکھ بھال فراہم کرنے والے، صحت عامہ، ترقی پذیر ملک، پائیدار ترقی کے اہداف

摘要

Abstract in 中国人 (Chinese)

背景

糖尿病，特别是2型糖尿病，是一个日益严重的全球健康问题，在孟加拉国的患病率从2010年的3.9%上升到2018年的8.3%，预计到2045年几乎将翻一番。许多人在正式医疗系统之外管理糖尿病，这受到他们的知识、财务资源和护理获取的影响。探索寻求健康行为和医疗网络至关重要，但尚未得到充分研究。本研究旨在评估达卡公共公园中自报糖尿病患者健康寻求行为、知识和医疗网络，以推荐改进管理的策略。

方法

在两个公共公园进行了一项定性探索性研究，目标人群为自我认定的40岁及以上糖尿病患者。使用半结构化指南进行了十五次与糖尿病患者和公园医疗服务提供者的深入访谈。数据使用主题内容分析法进行分析。

研究结果

参与者主要是来自高社会经济背景的50-60岁男性，他们对糖尿病风险因素（如焦虑）有很好的了解，并认识到生活方式改变的重要性。并发症包括功能障碍和心血管问题。医生是主要的信息来源，而BIRDEM因其声誉和价格合理而受到青睐。一些参与者使用顺势疗法和草药治疗。每月糖尿病护理费用超过1000塔卡，公园提供者通常缺乏正式培训，但在其中起到了关键作用。生活方式的改变包括饮食、锻炼、遵守药物治疗和精神支持。

Conclusion

主要障碍包括性别差异、经济限制和对替代治疗的依赖。整合非正式提供者、加强健康教育以及解决焦虑、性健康和性别障碍可以改善糖尿病管理和公平性。

关键词

寻求健康行为、糖尿病、定性研究、医疗服务提供者、公共卫生、发展中国家、可持续发展目标

Résumé

Contexte

Le diabète sucré, en particulier le diabète de type 2, est une préoccupation mondiale croissante en matière de santé, avec une prévalence au Bangladesh passant de 3,9 % en 2010 à 8,3 % en 2018, et prévue pour presque doubler d'ici 2045. De nombreuses personnes gèrent le diabète en dehors des systèmes de santé formels, influencées par leurs connaissances, leurs ressources financières et leur accès aux soins. Explorer les comportements de recherche de soins et les réseaux de santé est crucial mais sous-exploré. Cette étude vise à évaluer les comportements de recherche de soins, les connaissances et les réseaux de soins de santé des diabétiques autodiagnostiqués dans les parcs publics de Dhaka afin de recommander des stratégies pour une meilleure gestion.

Méthodes

Une étude exploratoire qualitative a été menée dans deux parcs publics, ciblant les diabétiques auto-identifiés âgés de 40 ans et plus. Quinze entretiens approfondis avec des diabétiques et des prestataires de soins de santé des parcs ont été réalisés à l'aide d'un guide semi-structuré. Les données ont été analysées à l'aide d'une analyse de contenu thématique.

Résultats

Les participants, principalement des hommes âgés de 50 à 60 ans issus de milieux socio-économiques élevés, avaient une bonne connaissance des facteurs de risque du diabète, tels que l'anxiété, et reconnaissaient l'importance des changements de mode de vie. Les complications comprenaient des dysfonctionnements sexuels et des problèmes cardiovasculaires. Les médecins étaient la principale source d'information, et BIRDEM était préféré pour sa réputation et son accessibilité financière. Certains participants utilisaient des traitements homéopathiques et à base de plantes. Les coûts mensuels des soins du diabète dépassaient 1 000 takas, les prestataires de soins, souvent sans formation formelle, jouant un rôle clé. Les modifications du mode de vie comprenaient l'alimentation, l'exercice, l'adhésion aux médicaments et le soutien spirituel.

Conclusion

Les principaux obstacles incluent les disparités de genre, les contraintes financières et la dépendance aux traitements alternatifs. Intégrer les prestataires informels, améliorer l'éducation à la santé et aborder l'anxiété, la santé sexuelle et les barrières de genre pourraient améliorer la gestion du diabète et l'équité.

Mots-clés

Comportement de recherche de soins, Diabète, Recherche qualitative, Fournisseurs de soins de santé, Santé publique, Pays en développement, Objectifs de développement durable

Аннотация

Предпосылки

Сахарный диабет, особенно диабет 2 типа, является растущей глобальной проблемой здравоохранения, с распространенностью в Бангладеш, увеличившейся с 3,9% в 2010 году до 8,3% в 2018 году, и прогнозируемой почти удвоением к 2045 году. Многие люди управляют диабетом вне формальных систем здравоохранения, под влиянием их знаний, финансовых ресурсов и доступа к медицинской помощи. Изучение поведения в поисках медицинской помощи и сетей здравоохранения является критически важным, но недостаточно исследованным. Это исследование направлено на оценку поведения в поиске медицинской помощи, знаний и сетей здравоохранения самозаявленных диабетиков в общественных парках Дакки с целью рекомендации стратегий для улучшенного управления.

Методы

Качественное исследование было проведено в двух общественных парках, нацеливаясь на самоопределившихся диабетиков в возрасте 40 лет и старше. Пятнадцать углубленных интервью с диабетиками и медицинскими работниками парков были проведены с использованием полуструктурированного руководства. Данные были проанализированы с использованием тематического контент-анализа.

Результаты

Участники, в основном мужчины в возрасте 50-60 лет из высоких социально-экономических слоев, хорошо знали факторы риска диабета, такие как тревожность, и признавали важность изменений в образе жизни. К осложнениям относились сексуальная дисфункция и сердечно-сосудистые проблемы. Врачи были основным источником информации, а BIRDEM предпочитали за его репутацию и доступность. Некоторые участники использовали гомеопатические и травяные средства. Ежемесячные расходы на лечение диабета превышали 1,000 так, при этом ключевую роль играли поставщики услуг парка, часто не имеющие формального обучения. Изменения в образе жизни включали диету, физические упражнения, соблюдение режима приема лекарств и духовную поддержку.

Заключение

Ключевые барьеры включают гендерные различия, финансовые ограничения и зависимость от альтернативных методов лечения. Интеграция неформальных поставщиков, улучшение здравоохранительного образования и решение проблем, связанных с тревожностью, сексуальным здоровьем и гендерными барьерами, могут улучшить управление диабетом и справедливость.

Ключевые слова

Поиск медицинской помощи, Диабет, Качественное исследование, Поставщики медицинских услуг, Общественное здоровье, Развивающаяся страна, Цели устойчивого развития

Resumen

Antecedentes

La diabetes mellitus, particularmente la diabetes tipo 2, es una creciente preocupación de salud global, con una prevalencia en Bangladesh que aumentó del 3.9% en 2010 al 8.3% en 2018, y se proyecta que casi se duplicará para 2045. Muchas personas manejan la diabetes fuera de los sistemas de salud formales, influenciadas por su conocimiento, recursos financieros y acceso a la atención. Explorar los comportamientos de búsqueda de atención médica y las redes de atención sanitaria es crítico pero poco explorado. Este estudio tiene como objetivo evaluar los comportamientos de búsqueda de atención médica, el conocimiento y las redes de atención sanitaria de los diabéticos autoinformados en los parques públicos de Dhaka para recomendar estrategias de mejora en la gestión.

Métodos

Se realizó un estudio exploratorio cualitativo en dos parques públicos, dirigido a diabéticos autodiagnosticados de 40 años o más. Se realizaron quince entrevistas en profundidad con diabéticos y proveedores de atención médica del parque utilizando una guía semiestructurada. Los datos fueron analizados utilizando un análisis de contenido temático.

Hallazgos

Los participantes, principalmente hombres de 50 a 60 años de entornos socioeconómicos altos, tenían un buen conocimiento de los factores de riesgo de la diabetes, como la ansiedad, y reconocían la importancia de los cambios en el estilo de vida. Las complicaciones incluían disfunción sexual y problemas cardiovasculares. Los médicos eran la principal fuente de información, y BIRDEM era preferido por su reputación y asequibilidad. Algunos participantes utilizaron tratamientos homeopáticos y herbales. Los costos mensuales de atención para la diabetes superaron los 1,000 takas, con los proveedores de parques, a menudo sin formación formal, desempeñando un papel clave. Las modificaciones del estilo de vida incluyeron dieta, ejercicio, adherencia a la medicación y apoyo espiritual.

Conclusión

Las principales barreras incluyen las disparidades de género, las limitaciones financieras y la dependencia de tratamientos alternativos. Integrar a los proveedores informales, mejorar la educación en salud y abordar la ansiedad, la salud sexual y las barreras de género podría mejorar el manejo de la diabetes y la equidad.

Palabras clave

Conducta de búsqueda de atención, Diabetes, Investigación cualitativa, Proveedores de atención médica, Salud pública, País en desarrollo, Objetivos de Desarrollo Sostenible

What is already known in study's context

- The increasing prevalence of diabetes in low- and middle-income countries, including Bangladesh, is well-documented.
- Chronic diseases like diabetes are a leading cause of morbidity and mortality globally, particularly affecting low- and middle-income countries.
- Previous studies indicate that socioeconomic status influences health-seeking behavior and access to healthcare services.
- 4.Knowledge of Risk Factors: It is widely recognized that awareness of diabetes risk factors is crucial for effective management and prevention.
- Many individuals with chronic illnesses seek alternative treatments, often driven by dissatisfaction with conventional medical care.
- Existing literature highlights that women are often less likely to be diagnosed with chronic conditions and may have limited access to specialized care compared to men.

What this study adds to the existing literature

- Highlights the specific health-seeking behaviors of self-reported diabetics in informal settings like public parks, an underexplored area in Bangladesh.
- Provides demographic details, showing a predominance of men aged 50-60 from higher socioeconomic backgrounds engaging in diabetes management.
- Confirms high awareness among participants regarding diabetes risk factors and complications, indicating effective community health education efforts.
- Documents the use of homeopathic and herbal remedies, illustrating the prevalence of complementary therapies among diabetics alongside conventional care.
- Identifies significant gender disparities in diabetes diagnosis and care-seeking behavior, suggesting a need for gender-sensitive approaches in health interventions.
- Sheds light on the financial constraints faced by diabetics, emphasizing the impact of out-of-pocket costs on healthcare access and management.

References

1. World Health Organization. The World Health Report: 2002: Reducing the risks, promoting healthy life. Geneva: World Health Organization; 2002. Available from: <https://iris.who.int/handle/10665/42510>
2. World Health Organization. Preventing chronic diseases: a vital investment. Geneva: World Health Organization; 2005.
3. Roser M, Ritchie H, Spooner F. Burden of disease. Available from: <https://ourworldindata.org/burden-of-disease>
4. World Health Organization. Diabetes. 2023. Available from: <https://www.who.int/news-room/fact-sheets/detail/diabetes>
5. International Diabetes Federation. Diabetes fact and figures. Available from: <https://idf.org/about-diabetes/diabetes-facts-figures/>
6. Moucheraud C, Lenz C, Latkovic M, et al. The costs of diabetes treatment in low- and middle-income countries: a systematic review. *BMJ Global Health*. 2019;4:e001258.
7. Ahsan KZ, Iqbal A, Jamil K, Haider MM, Khan SH, et al. Socioeconomic disparities in diabetes prevalence and management among the adult population in Bangladesh. *PLOS ONE*. 2022;17(12):e0279228. Available from: <https://doi.org/10.1371/journal.pone.0279228>
8. Akhtar S, Nasir JA, Sarwar A, et al. Prevalence of diabetes and pre-diabetes in Bangladesh: a systematic review and meta-analysis. *BMJ Open*. 2020;10:e036086. doi:10.1136/bmjopen-2019-036086
9. Hossain MB, Khan MN, Oldroyd JC, Rana J, Magliago DJ, et al. Prevalence of, and risk factors for, diabetes and prediabetes in Bangladesh: Evidence from the national survey using a multilevel Poisson regression model with a robust variance. *PLOS Global Public Health*. 2022;2(6):e0000461.
10. Jennings HM, Morrison J, Akter K, et al. Care-seeking and managing diabetes in rural Bangladesh: a mixed methods study. *BMC Public Health*. 2021;21:1445. Available from: <https://doi.org/10.1186/s12889-021-11395-3>
11. Tipping G, Segal L. Health seeking behavior in a developing country. *J Health Soc Behav*. 1995;36(2):169-81.
12. Zaman MM, et al. Health seeking behavior for diabetes among rural Bangladeshi patients. *Diabetes Res Clin Pract*. 2004;64(3):189-98.
13. Jain AK, et al. Perceptions of care quality among diabetic patients: A study in India. *Int J Diabetes Dev Ctries*. 2006;26(1):19-25.
14. Mahtab HJ, Chowdhury TA. Gender differences in the utilization of healthcare services among diabetic patients in Bangladesh. *Diabetes Care*. 2002;25(2):289-90.
15. Qureshi RA, Shaikh MA. Factors influencing alternative health-seeking behavior among diabetic patients in Karachi, Pakistan. *BMC Health Serv Res*. 2006;6:83.
16. Khatun F, Sultana S, Rahman M, et al. Health-seeking behavior and its association with diabetes complications: A study in rural Bangladesh. *Diabetes Metab Syndr*. 2020;14(5):1157-1163. doi:10.1016/j.dsx.2020.05.016
17. Ali L, Baig M, Malik F, et al. The burden of diabetes in the most vulnerable populations: A systematic review in South Asia. *Diabetol Metab Syndr*. 2018;10:27. doi:10.1186/s13098-018-0320-3
18. Parveen S, Rahman M, Hossain G. Gendered perceptions and health-seeking behavior in Bangladesh: A case study of diabetes care. *J Health Psychol*. 2021;26(6):836-846. doi:10.1177/13591053211004837
19. Salway S, Hossain M, Rahman F. Gender and access to healthcare in Bangladesh: A study of diabetes care among women. *Int J Public Health*. 2017;62(6): 627-635. doi:10.1007/s00038-017-0997-1
20. Shamsuddin K, Rahman M. Rural healthcare access in Bangladesh: Barriers and opportunities in managing diabetes. *Rural Remote Health*. 2018;18(3):4254. doi:10.22605/RRH4254
21. Alam S, Ali M, Sultana N. Socioeconomic status and healthcare access for diabetes patients in Bangladesh. *Health Policy Plan*. 2019;34(3):198-207. doi:10.1093/heapol/czy112
22. Hasan A, Rahman M, Hossain D, et al. The impact of socioeconomic status on healthcare access for diabetes in Bangladesh: A cross-sectional study. *Diabetology & Metabolic Syndrome*. 2020;12:31. doi:10.1186/s13098-020-00551-7
23. Islam F, Hasan M. Informal healthcare utilization and its impact on diabetes management in Bangladesh. *Trop Med Infect Dis*. 2020;5(3):100. doi:10.3390/tropicalmed5030100
24. Hossain M, Hossain G. Perceptions and stigma surrounding diabetes in Bangladesh: Implications for health-seeking behavior. *J Public Health Policy*. 2020;41(2):192-206. doi:10.1057/s41271-019-00203-w
25. Parveen S, Sultana N. Gendered stigma and health-seeking behavior in chronic diseases: A study of diabetes in Bangladesh. *J Gender Studies*. 2019;28(3):348-360. doi:10.1080/09589236.2019.1577649
26. Hussain A, Rahim MA, Khan AKA, Ali SMK, Vaaler S. Type 2 diabetes in rural and urban populations: diverse prevalence and associated risk factors in Bangladesh. *Diabet Med*. 2005;22(7):931-936.

27. Grace C, Begum R, Subhani S, Kopelman P, Trisha. Prevention of type 2 diabetes in British Bangladeshis: qualitative study of community, religious, and professional perspectives. *BMJ*. 2008;337
28. Kahn R, Cooper LA, Delahanty LM. Pathophysiology and management of type 2 diabetes: Perspectives on the role of the nurse. *Diabetes Care*. 2005;28(5):1211-7. Available from: <https://doi.org/10.2337/diacare.28.5.1211>
29. Funnell MM, Anderson RM, Nambudripad K. Empowering patients with diabetes: The role of the healthcare professional. *Diabetes Educ*. 2010;36(3):358-67. Available from: <https://doi.org/10.1177/0145721710363572>
30. Rahman MM, Bhowmik BK. Understanding the barriers to diabetes care in Bangladesh: A qualitative study. *BMC Public Health*. 2016;16:304. Available from: <https://doi.org/10.1186/s12889-016-2933-4>
31. Bowers A, Smith MA. The role of self-efficacy in diabetes management. *Diabetes Care*. 2005;28(10):2366-71. Available from: <https://doi.org/10.2337/dc05-0274>
32. Hossain MM, et al. The socio-economic factors influencing diabetes management in Bangladesh. *J Diabetes Res*. 2015;2015:Article ID 729786. Available from: <https://doi.org/10.1155/2015/729786>
33. O'Brien MA, et al. The role of complementary and alternative medicine in diabetes management. *J Complement Integr Med*. 2005;2(1):25-34. Available from: <https://doi.org/10.2202/1553-3840.1014>
34. Ghosh A, et al. Diabetes care in low and middle-income countries: A focus on Bangladesh. *BMC Health Serv Res*. 2019;19:143. Available from: <https://doi.org/10.1186/s12913-019-3950-7>
35. Al Arouj M, et al. Recommendation for management of diabetes in Ramadan: An expert panel report. *Diabetes Care*. 2005;28(9):2288-94. Available from: <https://doi.org/10.2337/dc05-1220>
36. World Health Organization. Global report on diabetes. 2016. Available from: https://iris.who.int/bitstream/handle/10665/204871/9789241565257_eng.pdf?sequence=1
37. Chowdhury MAB, Islam M, Rahman J, et al. Diabetes among adults in Bangladesh: changes in prevalence and risk factors between two cross-sectional surveys. *BMJ Open*. 2022;12:e055044. doi: 10.1136/bmjopen-2021-055044

Publication history: Received: 16th October 2024 Accepted: 22nd November 2024 First published: 25th December 2024






Unlock the power of impactful publishing with THOQN! Here's why researchers worldwide choose us:

- **Seamless Submission Process:** Submit your work effortlessly through our user-friendly platform.
- **Expert Peer Review:** Receive constructive feedback from leading experts to elevate your research.
- **Lightning-Fast Publication:** See your accepted work published swiftly to reach the global audience without delay.
- **Comprehensive Data Support:** Publish with confidence, including large datasets and complex analyses.

At THOQN, your research shapes the future. Join us today! [Learn more!](#)