

Exploring The Lifestyle Factors And Diabetes Management Approaches Among Women

Saeeda Anjum Buriro¹, Afshan Nazly², Fatima Parvaiz Hashmi³, Yasmin Alexander Robinson⁴, Agnes Alferd⁵, Munnaza Parveen⁶

Abstract:

This study explores the relationship between lifestyle factors and diabetes among women through qualitative analysis. Five female respondents from Civil Hospital Karachi participated in interviews, revealing insights into the impact of lifestyle changes on managing diabetes-related stress, anxiety, and social and psychological factors. For this, the study used phenomenological approach for the collecting of the data and used Clark and Braun (2017) thematic analysis for this.

Furthermore, the study identifies diet, exercise, and stress management as comprehensive strategies for diabetes management, offering evidence-based techniques to support individuals in improving their self-care practices. Cultural influences also emerge as significant in diabetes management, with respondents adapting traditional recipes and relying on family support to navigate cultural dietary restrictions. The importance of cultural sensitivity in individualized diabetes therapies is highlighted, emphasizing the need to consider diverse cultural backgrounds in treatment approaches.

Additionally, the interviews underscore the vital role of social support in diabetes management, particularly during cultural festivities centered around food. Understanding and encouragement from family and friends facilitate healthier choices and diabetes management, emphasizing the necessity of social support in chronic disease management. Overall, the findings emphasize the potential of lifestyle modifications to enhance diabetes management and health outcomes, advocating for proactive lifestyle changes and holistic diabetes care that address the diverse needs and challenges of individuals living with the condition.

Keywords: Diabetes, Lifestyle, Socioeconomic Conditions, Diet, Exercise.

Introduction

The global prevalence of diabetes mellitus continues to rise, posing a significant public health challenge. While diabetes affects individuals of all genders, emerging evidence underscores the need for a nuanced understanding of its impact on women (Zhang et al., 2023). Diabetes is a complex chronic illness with many facets that affects individuals not just physiologically but also psychologically (Buriro et al., 2024). Diabetes can cause problems at many different parts

¹Ph.D. Scholar, University of Sindh Jamshoro.

²Associate Professor ZUFONAM, Ziauddin University Karachi.

³Medical Officer, Memon Medical Institute Hospital Karachi.

⁴⁻⁵Lecturer Jinnah College of Nursing Sohail University Karachi.

⁶Associate Professor, Jinnah College of Nursing Sohail University Karachi.

Corresponding author Saeeda Anjum Buriro

of the body, including foot ulcers, cardiovascular disease, retinopathy, nephropathy, and neuropathy (Papatheodorou et al., 2018). According to the IDF Diabetes Atlas, 2021, type 2 diabetes prevalence was 26.7% in Pakistan.

Globally, live births affected by Gestational Diabetes Mellitus (GDM) and the prevalence of GDM are highest in South East Asia (27%) (Lawrence, Wall, & Bloomfield, 2019). In low-middle-income countries (LMIC), where access to healthy food and diet is frequently insufficient, a higher frequency is observed of diabetic diagnosed women and children (Ana et al., 2021). Research in the South Asian region found that 13.9% of pregnant women had GDM cases. Between 1996 and 2017, the reported prevalence of GDM in Pakistan rose from 3.3% to 17.2% (Shehzad et al., 2021).

Meta-analysis studies estimate that 36% of people with diabetes have diabetes distress (DD). However, only 20% of cases result in the co-occurrence of depressive symptoms (Salih et al., 2020). Approximately one in five people with diabetes have depression (Rani & Begum, 2016).

Women with diabetes often contend with a myriad of biological, psychosocial, and cultural factors that shape their disease management experiences (Karavasileiadou et al., 2022). Among these factors, lifestyle choices play a pivotal role in influencing disease progression, treatment outcomes, and overall quality of life (Buriro et al., 2023). However, the relationship between lifestyle factors and diabetes management in women remains a complex and underexplored area of research (Buriro et al., 2023). This study seeks to address this gap by examining how various aspects of lifestyle, including diet, physical activity, stress management, and social support networks, interact with diabetes management practices among women (Moradi et al., 2023).

Understanding the interrelationships between lifestyle choices and diabetes management is essential for developing targeted interventions that address the unique needs of women with diabetes (Siegel et al., 2020). Sociocultural norms, economic disparities, and access to healthcare resources further complicate the landscape of diabetes care for women (Buriro et al., 2024). By exploring these dynamics, this research aims to shed light on the challenges faced by healthy lifestyles and accessing appropriate diabetes management resources (Montali et al., 2022). Moreover, this study recognizes the importance of taking a holistic and patient-centred approach to diabetes care, one that acknowledges the diverse experiences and preferences of women with diabetes. Through a comprehensive exploration of the interplay between lifestyles and diabetes management, this research seeks to inform the development of tailored interventions that empower women to take control of their health and improve diabetes outcomes.

Statement of the Problem

Women diagnosed diabetes face lots of challenges in their daily life routine and ineffectively managing their day today business, with lifestyle choices exerting a profound influence on outcomes, behaviors and managing the tasks. Current research is designed to address the intricate relationship between lifestyles and diabetes management among females diagnosed diabetes. Despite the recognized importance of lifestyle factors in diabetes care, studies predominantly focus on mixed-gender cohorts, overlooking the unique biological, psychosocial, and cultural dimensions that shape women's experiences with the disease (Buriro et al., 2024). Moreover, there is a dearth of research that considers the diverse sociocultural contexts in which women navigate their diabetes management journey, including cultural norms, socioeconomic disparities, and access to healthcare resources (Shaikh, Sharif & Seemi, 2023). This knowledge gap not only hampers our understanding of the specific challenges faced by women with diabetes but also impedes the development of tailored interventions aimed at

addressing their distinct needs and promoting optimal health outcomes. Therefore, there is an urgent need for research dedicated in exploring the interplay of lifestyles and diabetes management specifically in women, with a focus on elucidating the contextual factors that influence their disease management practices and devising strategies to enhance their overall well-being.

Research Questions

1. How do food, exercise, and stress management affect diabetes management in women?
2. How do cultural and social support networks affect women's lifestyle choices and diabetes management?
3. How does lifestyle change affect diabetes management for women?
4. What are the challenges and solutions to implementing and maintaining diabetes?

Literature Review

The prevalence of non-communicable diseases associated with obesity is increasing significantly, resulting in a huge cost burden on both the healthcare industry and society at large (World Health Organization, 2020). The main components of this are cardiovascular ailments, specifically heart disease and stroke, which were the primary causes of mortality in 2012. Additionally, diabetes mellitus, which has experienced significant growth (Buriro et al., 2024) and is now considered a major epidemic, is regarded as a public health emergency by most nations (Tremmel, 2017).

Diabetes mellitus is a complex chronic condition characterized by hyperglycemia, which affects millions of individuals worldwide (Mukhtar, Galalain & Yunusa, 2020). While the prevalence of diabetes is increasing globally, recent evidence suggests that the burden of the disease disproportionately affects women (Shahid, Ahmed & Yadav, 2021). Women with diabetes face unique challenges in managing their condition due to a variety of factors, including biological differences, sociocultural norms, and lifestyle choices (Thong et al., 2020). Interplay between lifestyles and diabetes management specifically in women, synthesizing existing research to provide insights into the complex dynamics that influence disease outcomes and inform future interventions (de Wit et al., 2020).

Recent research suggests that prolonged periods of inactivity have a detrimental impact on health, regardless of other factors such as weight, food, and exercise (Teychenne, Ball, & Salmon, 2010). Furthermore, elderly individuals may experience the development of anxiety and sadness because of physical inactivity (Chang, Wray, & Lin, 2014). Numerous research have been conducted in the past about chronic illness and its influence on mental health well-being (Tanzil & Jamali, 2016). Nevertheless, there is a scarcity of published research on the correlation between diabetes and mental health disorders, as well as a dearth of recorded information about the direct link between changing behavior and mental disease or stress in these individuals (Buriro et al., 2024). This sedentary and inactive lifestyle exacerbates the diabetic condition, particularly among the adult population of Pakistan and this study will be considered as step towards further research in relation with diabetes and lifestyle.

Biological Factors and Gender Differences in Diabetes Management

Biological differences between men and women contribute to variations in the manifestation and progression of diabetes. Hormonal fluctuations, particularly during puberty, pregnancy, and menopause, can significantly impact glycemic control and insulin sensitivity in women (Khan & Khan, 2004). Pregnancy-related insulin resistance increases the risk of gestational

diabetes mellitus (GDM), which not only affects maternal health but also predisposes women to type 2 diabetes later in life (Alkhatib, & Tuomilehto, 2019). Additionally, studies have shown that women may experience different symptoms of diabetes compared to men, leading to delays in diagnosis and treatment initiation. Understanding these gender-specific biological factors is essential for optimizing diabetes management strategies tailored to the needs of women.

Sociocultural Influences on Lifestyle Choices and Diabetes Management

Sociocultural factors play a pivotal role in shaping women's lifestyle choices and their ability to manage diabetes effectively. Cultural norms surrounding food preferences, meal patterns, and body image ideals can influence dietary behaviours among women with diabetes (Buriro et al., 2023b; Buriro et al., 2024). For example, cultural traditions may dictate the consumption of high-carbohydrate foods during celebrations or religious holidays, posing challenges for glycemic control (Hakeem & Fawad, 2010). Interestingly, the people that have inadequate health literacy, specifically the elderly, low-income individuals, and those with less education, bear the greatest weight of chronic illnesses, such as diabetes and hypertension (Shawahna, Debay, & Rahman, 2013).

Diabetes is a long-term illness that is very complicated and needs strict self-care, education, and management for particularly women. It often relies on printed educational materials about diet and self-care practices, along with vocal instructions. Because of this, it requires sophisticated health literacy abilities (Shehzad et al., 20221). Moreover, gender roles and caregiving responsibilities often place additional stress on women, impacting their ability to engage in regular physical activity and self-care practices (Buriro et al., 2024). Socioeconomic disparities further exacerbate these challenges, with limited access to healthcare resources and healthy food options hindering diabetes management efforts among marginalized populations of women.

Lifestyle Interventions and Behavioral Strategies for Diabetes Management

Pakistan's population is divided into 60% rural and 40% urban. The population growth in urban areas has significantly increased, exacerbating the situation in the impoverished areas of Karachi, one of Pakistan's largest cities. These areas, located in the suburbs, are home to a diverse population consisting of economic and political immigrants as well as refugees from various national, regional, linguistic, and religious backgrounds. The phenomenon of rural-to-urban migration, coupled with industrialization and the consequential rapid population expansion resulting from economic crises, has compelled many to reside in impoverished urban areas commonly referred to as slums (Saeed et al., 2018). The prevalence of overweight and obesity is rapidly increasing among the Pakistani population, notwithstanding the existing high rates of undernutrition in children and adolescents (Buriro et al., 2024). Obesity and diabetes mellitus are two significant public health concerns that contribute to the increased burden of malnutrition.

Despite the numerous challenges women face in managing diabetes, lifestyle interventions have demonstrated considerable efficacy in improving glycemic control and overall health outcomes. Dietary modifications, such as adopting a Mediterranean or low-glycemic index diet, have been shown to reduce the risk of diabetes complications and improve cardiovascular health in women (Buriro et al., 2023b; Buriro et al., 2024). Similarly, regular physical activity, including aerobic exercise and resistance training, plays a crucial role in enhancing insulin sensitivity and promoting weight loss among women with diabetes (Basit, Fawad & Baqa, 2019). Behavioural strategies, such as motivational interviewing and goal-setting techniques, have also been effective in facilitating behavior change and improving adherence to diabetes self-management practices in women.

The Interplay between Lifestyles and Diabetes Management

Diabetes in women is a complex and multifaceted situation. Gender prejudice, combined with the disadvantages faced by less wealthy women, particularly those who have experienced many pregnancies, increases the likelihood of greater rates of illness and death (Basit & Riaz, 2013). The interplay between lifestyles and diabetes management in women is a multifaceted phenomenon influenced by biological, sociocultural, and behavioural factors (Basharat, 2017). Understanding these complexities is essential for developing targeted interventions that address the unique needs of women with diabetes and promote optimal health outcomes (Burio et al., 2023a). Future research should continue to explore the underlying mechanisms driving gender differences in diabetes management and identify innovative strategies to empower women to take control of their health and well-being. By integrating gender-sensitive approaches into diabetes care, we can strive towards achieving equity in health outcomes and reducing the global burden of diabetes among women.

Method and Procedure

The study employs a qualitative methodology. To gather robust data for the study, a phenomenological technique was employed as the research strategy. The study used a snowball sampling technique to assess female participants' live experiences of their lifestyle and diabetes. The criteria of the study sample are women diagnosed with Diabetes. The study sample is N=5 taken from the Civil Hospital Karachi, females who are aged between 22 and 35 years old. While collecting the data, ethical measures were taken, and the anonymity of the actual record of the participants was ensured. The study followed the willingness of the participants, and they were given the freedom to quit at any time if they wished to. Semi-structured interviews were used for the collection of the data. The interviews were recorded and transcribed. The codes were generated, and themes were developed. The study used thematic analysis by following Clark and Braun (2017) thematic analysis procedure. Themes were drawn objectively to explain phenomena. The researcher has ensured objective positionality in data collection and analysis.



The thematic analysis process was followed by the model presented by Clarke and Braun (2017), consisting of six distinct steps and provides a comprehensive structure for doing qualitative research. In the first stage, researchers engage in a thorough review of the raw data

to build a deep understanding of its content. This process is called data familiarization. Next, the second stage entails generating codes by identifying and assigning labels to crucial concepts and patterns. During the third phase, the codes are methodically classified into overarching themes. At this stage, the linked codes are combined to create a coherent story. The fourth stage in the research process entails the meticulous assessment of themes, emphasizing the need for researchers to thoroughly analyze the accuracy and relevance of the selected subjects. Once the themes have been established, the next step involves assessing their significance and examining the broader meanings and connections within the gathered material. The last stage of the research process is the dissemination of findings, wherein researchers proficiently elucidate their conclusions in a manner that is comprehensible and compelling, ensuring the study's importance and practicality. Employing a methodical approach in analyzing qualitative data ensures the maintenance of strictness and clarity, hence improving the trustworthiness and dependability of the research.

Results

Dietary Management, Physical Activity and Stress Management with Diabatese

R1: Management of diabetes requires food. A diet rich in vegetables, lean meats, and whole grains helps me manage my blood sugar.....aaa... Quantity and timing of meals are also essential. Portion control and meal spacing help me control blood sugar....(silence)...I must exercise regularly for my diabetes. I feel better and have better insulin sensitivity after walking (smiling)... I've prioritized stress management. I practice deep breathing and meditation daily because stress affects my blood sugar.

R1's emphasis on a balanced diet, regular exercise, and stress management aligns with established guidelines for diabetes care. The participant's insights provide a valuable perspective on the practical application of these strategies in daily life.

R2: My diabetes is affected by food. Limiting processed foods, sugary snacks, and refined carbohydrates helps me manage blood sugar. I eat whole foods like fruits, veggies, and lean proteins (silence)... exercise is another important part of my diabetes management. I cycle, take fitness classes, or walk most days. Aaa.....I feel better and have lower blood sugar after exercising. I suffer with stress, but spending time outside, practicing mindfulness, and seeing a therapist help me manage my diabetes.

The interview with R2 provides valuable insights into the practical aspects of diabetes management. By focusing on a diet rich in whole foods, maintaining an active lifestyle, and employing effective stress management techniques, R2 demonstrates a comprehensive approach to managing their condition. These strategies not only help control blood sugar levels but also contribute to overall well-being.

R3: My diabetes is affected by food. I manage my blood sugar by eating a balanced diet of fiber-rich fruits, vegetables, and whole grains. I avoid sugary and fatty foods and watch portion amounts. Regular exercise helps me manage diabetes.....aaa..... I prioritise stress management for diabetes control.....(someone knocked the door)..... Stress management and blood sugar control are helped by yoga, meditation, and deep breathing.

R3's strategy for diabetes treatment emphasizes the interdependence of food, exercise, and stress management in maintaining ideal blood sugar levels. Their practices demonstrate the use of evidence-based solutions that can provide guidance and assistance to those who are managing diabetes.

R4: I manage my diabetes by diet. I eat lots of vegetables, aaa... lean meats, and whole grains to avoid high blood sugar from sugary snacks and processed carbs. (taking breathe)... I avoid

sugary drinks and sip herbal tea or water. Aaa...I do exercise which is essential to my diabetic management....aaaa... Walking, and physical exercise keeps me active. Physical exercise improves my energy, mood, and blood sugar. To manage diabetes and stress, I practise mindfulness, spend time outdoors, and undertake hobbies.

According to the respondent 4 she controls diabetes via nutrition, exercise, and stress management. They avoid high blood sugar by eating vegetables, lean proteins, nutritious grains, and herbal tea or water instead of sugary drinks. Strength training, biking, and walking increase mood, energy, and blood sugar control, thus they must do it regularly. R4 manages stress with mindfulness, outdoor time, and hobbies, which help them manage diabetes.

R5: Food choices drastically impact my diabetes management. I keep stable blood sugar by eating lots of vegetables, grains, and lean proteins. ..aaa.. Sugars and processed carbs spike my blood sugar, so I avoid them. Regular exercise helps me manage diabetes (silence)... Stress management is part of my diabetes treatment. Relaxation techniques like deep breathing, meditation, and family time, watching dramas... aaaa.. help me to manage stress and blood sugar.

Respondent express that healthy life activities manage stress and lifestyle to face further severity of the stress or disease. Changing lifestyle and keep engaged in healthy lifestyle keeps relaxed and maintains well the life style.

Impact of Sociocultural Lifestyle on Diabetes Management

R1: Cultural meetups and social gatherings always give me ideas to try something new which shapes my food choices and diabetes management practices. Traditional dishes are often high in carbohydrates and sugars, so I've had to adapt recipes to make them healthier.... (silence)... Social support from my family helps me stay motivated to make these changes and stick to my diabetes management plan.

The interview with the respondent illustrates the interplay between cultural influences and diabetes management. By adapting traditional recipes and relying on family support, the respondent successfully navigates the challenges posed by their cultural dietary habits while effectively managing their diabetes. This approach highlights the importance of cultural sensitivity and social support in chronic disease management.

R2: Cultural celebrations often revolve around food, which can be challenging for managing my diabetes. However, my social support network understands my dietary restrictions and helps me find healthier alternatives during gatherings (silence)... Their encouragement and understanding make it easier for me to stick to my diabetes management goals.

The interview with the respondent underscores the critical role of social support in managing diabetes, especially during cultural celebrations centered around food. The respondent's experience illustrates that understanding and encouragement from family and friends are vital in helping them find healthier alternatives and maintain their diabetes management goals. This highlights the importance of a supportive social environment in chronic disease management.

R3: Cultural norms around food can sometimes clash with my diabetes management needs. However, my social support network, including friends and community members, has been instrumental in helping me navigate these challenges. Aaa... we share tips and recipes for healthier alternatives, and their encouragement keeps me motivated to prioritize my health.

The interview with the respondent illustrates the critical role of social support in managing diabetes, especially when cultural food norms present challenges. The respondent's experience highlights the importance of a supportive network that provides practical advice, shares

healthier recipes, and offers continuous encouragement. This community-driven approach is essential for maintaining effective diabetes management while respecting cultural traditions.

R4: Cultural traditions heavily influence my food choices, but my social support network has been incredibly supportive of my diabetes management journey. They respect my dietary restrictions and even join me in making healthier lifestyle choices... aaaa..... Their understanding and encouragement make it easier for me to stay on track with my diabetes management plan.

The interview with R4 emphasizes the need of social support in culturally-based diabetes management. R4's experience shows the necessity of a caring, understanding social network that respects dietary constraints and promotes healthy living. This collaboration improves diabetes management and builds community.

R5: Cultural and social norms play a significant role in shaping my lifestyle choices and diabetes management practices. My social support network, including friends, family, and community members, provides invaluable encouragement and practical assistance.... Aaaa... Whether it's sharing healthy recipes or exercising together, their support strengthens my commitment to managing my diabetes effectively.

The interview with R5 shows how cultural and social norms affect diabetes care and how important a supportive social network is. R5's experience shows that friends, family, and community members' support and practical help are crucial to diabetes treatment. This support network helps R5 stay dedicated to their health objectives by sharing activities and resources and collaborating on their care.

Impact of Lifestyle Change on Management of Diabetes

R1: Making lifestyle changes has had a profound impact on my diabetes management. By adopting healthier eating habits and incorporating regular exercise into my routine, I've been able to better control my blood sugar levels and reduce my reliance on medication....(someone knocked the door). These changes have not only improved my physical health but also boosted my overall well-being and confidence.

The interview with R1 illustrates the transformative power of lifestyle changes in managing diabetes and improving overall health and well-being. By adopting healthier eating habits and incorporating regular exercise into their routine, R1 has experienced significant improvements in blood sugar control and reduced reliance on medication. This underscores the importance of proactive lifestyle modifications in diabetes management and highlights the potential for positive outcomes beyond physiological health.

R2: Changing my lifestyle has been transformative for managing my diabetes. By focusing on a balanced diet, increasing physical activity, and managing stress, I've seen significant improvements in my blood sugar levels and overall health. These changes have empowered me to take control of my diabetes and live a more fulfilling life.

The interview with Participant 2 highlights the transformative power of lifestyle changes in managing diabetes and improving overall health and well-being. By focusing on a balanced diet, increasing physical activity, and managing stress, Participant 2 has achieved significant improvements in blood sugar control and overall health. This underscores the importance of proactive lifestyle modifications in diabetes management and emphasizes the potential for positive outcomes in empowering individuals to take control of their health and live fulfilling lives.

R3: Lifestyle changes have been instrumental in managing my diabetes effectively. By prioritizing healthy eating, staying active, and managing stress, I've been able to stabilize my blood sugar levels and reduce my risk of diabetes-related complications. These changes have not only improved my physical health but also enhanced my quality of life and sense of well-being.

The interview with Participant R3 highlights the transformative impact of lifestyle changes in effectively managing diabetes and enhancing overall well-being. By prioritizing healthy eating, staying active, and managing stress, Participant R3 has achieved significant improvements in blood sugar control and reduced the risk of diabetes-related complications. This underscores the importance of proactive lifestyle modifications in diabetes management and emphasizes the potential for positive outcomes in improving both physical health and quality of life.

R4: Making lifestyle changes has been challenging but rewarding in managing my diabetes. By adopting healthier habits, such as eating a balanced diet and exercising regularly, I've been able to better control my blood sugar levels and improve my overall health. These changes have given me a sense of empowerment and control over my diabetes management.

The interview with Participant R4 illustrates the challenges and rewards associated with making lifestyle changes to manage diabetes. By adopting healthier habits, such as maintaining a balanced diet and engaging in regular exercise, R4 has achieved better blood sugar control and overall health improvements. These changes have not only led to physiological benefits but also provided R4 with a sense of empowerment and control over their diabetes management. This underscores the importance of proactive self-care behaviors in achieving positive outcomes in diabetes management.

Participant 5: Lifestyle changes have been instrumental in managing my diabetes and improving my overall health. By focusing on healthy eating, staying active, and managing stress, I've been able to stabilize my blood sugar levels and reduce my reliance on medication. These changes have not only helped me better manage my diabetes but also improved my energy levels and quality of life.

The interview with Participant 5 highlights the transformative impact of lifestyle changes in managing diabetes and improving overall health. By focusing on healthy eating, staying active, and managing stress, Participant 5 has achieved better blood sugar control, reduced reliance on medication, and experienced improvements in energy levels and quality of life. This underscores the importance of proactive self-care behaviors in achieving positive outcomes in diabetes management and enhancing overall well-being.

Challenges And Solutions to Maintain the Diabetes

Participant 1: Balancing diabetes management with other responsibilities like work, family, and social commitments. Dealing with financial constraints that limit access to healthy food options and diabetes management resources. Coping with emotional challenges such as stress, anxiety, and depression, which can impact motivation and self-care practices.

The interview with Participant 1 sheds light on the complex challenges faced by individuals managing diabetes, including balancing responsibilities, overcoming financial constraints, and coping with emotional challenges. Participant 1's insights underscore the multifaceted nature of diabetes management and the need for comprehensive support systems that address not only physiological but also social and emotional aspects of care. This highlights the importance of holistic approaches to diabetes management that consider the diverse needs and challenges of individuals living with the condition.

R2. Overcoming food cravings and temptations, especially in environments where unhealthy food choices are prevalent. Managing diabetes-related complications and fluctuations in blood sugar levels, which can be physically and emotionally taxing. Navigating social situations and cultural norms that may not align with diabetes management practices, leading to feelings of isolation or judgment.

The interview with Participant 2 provides insight into the multifaceted challenges faced by individuals managing diabetes, including overcoming food cravings, managing complications, and navigating social and cultural influences. Participant 2's experiences highlight the physical and emotional toll of managing diabetes in environments where unhealthy food choices are prevalent and social norms may not align with diabetes management practices. This underscores the importance of support systems and strategies to address the diverse needs of individuals living with diabetes.

R3: Struggling to find time for regular exercise and meal planning amidst busy schedules and competing priorities. Dealing with stigma and misconceptions about diabetes, which can affect self-esteem and willingness to seek support. Facing healthcare system barriers, such as long wait times for appointments and limited access to specialized diabetes care.

The interview with Participant R3 provides insight into the multifaceted challenges faced by individuals managing diabetes, including time constraints, stigma, and healthcare system barriers. Participant R3's experiences highlight the difficulties of balancing diabetes management with busy schedules, coping with negative perceptions of the condition, and navigating obstacles within the healthcare system. This underscores the importance of addressing systemic barriers and providing comprehensive support to individuals living with diabetes to optimize health outcomes.

R4: Overcoming feelings of guilt and shame associated with diabetes diagnosis and perceived lifestyle choices. Managing stress and emotional eating patterns that may sabotage efforts to maintain a healthy lifestyle. Coping with the physical discomfort and fatigue associated with diabetes symptoms and medication side effects.

The interview with Participant 4 provides insight into the emotional and physical challenges faced by individuals managing diabetes. Participant 4's experiences highlight the difficulties of overcoming feelings of guilt and shame, managing stress and emotional eating patterns, and coping with physical discomfort and fatigue. This underscores the importance of addressing the psychosocial aspects of diabetes care and providing comprehensive support to individuals to enhance their overall well-being.

R5: Dealing with societal pressures and expectations related to body image and appearance, which can impact self-esteem and motivation for self-care. Struggling to afford medication, supplies, and healthcare services, particularly for those without adequate insurance coverage. Facing challenges in finding healthcare providers who understand and respect the unique needs of individuals with diabetes.

The interview with Participant 5 provides insight into the societal, financial, and healthcare-related challenges faced by individuals managing diabetes. Participant 5's experiences highlight the impact of societal pressures on body image, the financial burden of affording diabetes care, and the importance of receiving understanding and respectful care from healthcare providers. This underscores the need for comprehensive support systems that address the diverse needs and challenges of individuals living with diabetes.

Discussion

The themes identified in the interviews emphasize the multifaceted nature of effective diabetes management. Keeping in view the factors which help in the reducing the diabetes of the female respondents the results of the study focus on emphasis of maintaining a balanced diet, engaging in regular exercise, and practicing stress management aligns with established guidelines for diabetes care. Their insights provide practical examples of implementing these strategies in daily life, highlighting their importance in achieving optimal blood sugar control. Similarly, the interview transcription of the respondents showcases the comprehensive approach to diabetes management through a diet rich in whole foods, regular physical activity, and effective stress management techniques. These strategies not only contribute to controlling blood sugar levels but also promote overall well-being, emphasizing the interconnectedness of lifestyle factors in diabetes care.

Furthermore, by adopting the approach to managing diabetes through diet, exercise, and stress management offers a comprehensive model for others managing the condition. Their practices reflect evidence-based strategies that can inform and support individuals seeking to improve their diabetes management. Additionally, the interviews illustrate the significant influence of cultural factors on diabetes management. By adapting traditional recipes and leveraging family support, respondents successfully navigate challenges posed by cultural dietary habits while effectively managing their condition. This underscores the importance of cultural sensitivity and social support in chronic disease management, highlighting the need for tailored interventions that consider individual cultural backgrounds.

Moreover, the interviews highlight the critical role of social support in managing diabetes, particularly during cultural celebrations centered around food. Understanding and encouragement from family and friends play a vital role in helping individuals find healthier alternatives and maintain their diabetes management goals. This underscores the importance of a supportive social environment in chronic disease management. Overall, the interviews underscore the transformative power of lifestyle changes in managing diabetes and improving overall health and well-being. They emphasize the importance of proactive lifestyle modifications and holistic approaches to diabetes management that address the diverse needs and challenges of individuals living with the condition.

Conclusion

The study has been designed to analyse the relationship between the lifestyle of women and diagnosed with diabetes. The study used qualitative approach based on the n=5 female respondents from the Civil Hospital Karachi. The study reveals the significant impact of changing lifestyle can help to overcome the stress, anxiety and different social, psychological factors related to women health and life routine. Interview themes highlight the complexity of diabetes care. Keeping in view the phenomenological experiences the respondents have focused on a balanced diet, frequent exercise, and stress management follows diabetes recommendations. They demonstrate how to apply these tactics in daily life, emphasizing their importance in blood sugar regulation. The interview results show how a diet rich in healthy foods, frequent exercise, and stress management can control diabetes. These measures help regulate blood sugar and improve well-being, highlighting the role of lifestyle factors in diabetes care.

For others managing diabetes, the factors including diet, exercise, and stress management plan is comprehensive. Their evidence-based techniques can help diabetics improve their management. Cultural influences also affect diabetes management, as shown in the interviews. By adopting traditional recipes and using family assistance, respondents managed their disease despite cultural dietary restrictions. Culture and social support are crucial to chronic disease treatment, therefore individualized therapies must take into account individual cultural

Backgrounds.

The interviews also emphasise the need of social support in diabetes management, especially during food-related cultural festivities. Family and friends' understanding and support help people select healthier options and manage their diabetes. This emphasises the need of social support in chronic disease management. The interviews demonstrate how lifestyle modifications can improve diabetes management and health. They stress proactive lifestyle changes and holistic diabetes management that address the different needs and challenges of diabetics.

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