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SOCIAL SUPPORT AS A STRATEGY TO OVERCOME CHALLENGES IN DIABETES SELF-CARE MANAGEMENT

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Abstract

Background:

Diabetes mellitus is a chronic condition requiring strict self-care practices, including medication adherence, blood glucose monitoring, dietary control, physical activity, and foot care. Despite available guidelines, many patients struggle with consistent self-management due to personal, social, and systemic barriers. Social support from family, peers, and healthcare providers is recognized as a key factor that can enhance self-care behaviors and improve diabetes outcomes. Understanding the relationship between social support and diabetes self-care is critical to developing effective interventions, particularly in resource-limited settings.

Aim:

The study aimed to assess the role of social support in overcoming challenges in diabetes self-care management among patients attending tertiary care hospitals in Peshawar.

Methods:

A descriptive cross-sectional design was employed. The study included 100 adult participants with Type 1 or Type 2 diabetes, recruited using convenience sampling from two tertiary care hospitals. Data were collected using a structured questionnaire consisting of demographic characteristics, self-care practices, and social support measures. Descriptive statistics, frequencies, percentages, and Pearson correlation coefficients were calculated using SPSS version 25 to assess the relationship between social support and self-care behaviors.

Results:

Findings indicated that 60% of participants reported moderate social support, while 25% reported high support. Self-care practices were moderate for most participants, with blood glucose monitoring and medication adherence showing higher adherence compared to physical activity and foot care. Significant positive correlations were observed between overall social support and self-care behaviors ($r = 0.60$, $p < 0.001$), with emotional support showing the strongest association.

Conclusion:

Social support plays a vital role in enhancing diabetes self-care practices. Interventions focusing on emotional, informational, and practical support from family, peers, and healthcare providers are recommended to improve adherence and health outcomes.

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1. INTRODUCTION:

Diabetes mellitus is a long-term metabolic disease, which is marked by sustained hyperglycemia due to an impaired secretion or action of insulin that impacts various organs and body functions (American Diabetes Association (Oluchina, 2024).Self-management of diabetes is a daily behavior that includes taking medications, monitoring blood glucose levels, eating habits, physical exercise, and foot care (Powers et al., 2020). Social support is emotional, informational and practical support provided by family, peers or community to individuals to allow them to adjust to the demands of chronic illness (Oluchina, 2024).All these concepts are the basics of diabetes management and they directly translate into patient outcomes.

1.1 BACKGROUND OF THE STUDY:

With the increase in its diagnosis, diabetes has become an epidemic in many developing countries. Rapid atmospheric changes in eating habits, urbanization, and a sedentary lifestyle have made Pakistan one of the top countries with the highest diabetes prevalence. The increasing trend of diabetes has economic effects, including the cost of healthcare services, loss of productivity, and an increase in the number of people who die before reaching a healthy life expectancy. Considering these, it has become important to find out how to improve the mechanisms and supports for diabetes self-care (Chen & Lin, 2025). Self-care plays a vital role in avoiding the complications of diabetes and achieving good health. Patients who follow the self-care plan cope with diabetes more effectively and report an enhanced quality of life (Chen & Lin, 2025). The physical and psychological burden of diabetes is high. It requires the performance of different activities of daily life. Many find it difficult to comply with and self-care plan strategies without external support. Self-care management is a combination of personal ability and the existence of a supportive framework (Al-Dwaikat et al., 2023).

Self-care activities of many diabetic patients are incomplete, mainly due to insufficient self-care knowledge, economic barriers, lack of health services, and inability to adhere to a healthy lifestyle (Al-Dwaikat et al., 2023). These patients face many obstacles in practicing regular physical exercise, keeping track of their blood glucose levels, and controlling their diet. There is a lack of motivation that is usually accompanied by psychological stress. For many, the economic burden keeps them from using essential diabetic medications and supplies which leads to increased health risks (Wang et al., 2023).

Social support is very important for the effective management of diabetes. These supportive interactions positively impact motivation and treatment adherence. Such interactions build confidence regarding the ability to perform daily self-care activities (Hasan et al., 2024). Stress and the burden that come with the management of diabetes are alleviated with the support of others emotionally. The management of diabetes can be made easier with the provision of informational support. Practical support can assist with medication adherence and meal planning. The presence of positive social support systems can promote better management of diabetes.

Social support can positively affect the confidence level of an individual. Self-efficacy is the most critical psychological factor that serves the management of a chronic illness. People who have a higher level of self-efficacy are more likely to adhere to the treatment and lifestyle recommendations. Support from family and peers can positively affect confidence and support the adherence of the individual to treatment. Higher self-efficacy is correlated with improved control of blood sugar and chronic disease management (Parviniannasab et al., 2024).

The management of diabetes has a psychological element. The burden of managing diabetes can cause psychological stress, depression and emotional issues. These issues can be alleviated with social support. If the emotional burden of the individual is reduced, the individual is more likely to adhere to the treatment of the illness. Self-management of diabetes can be improved through emotional distress of the individual (Parviniannasab et al., 2024).

Family support has been found to be one of the most effective forms of diabetes support. Family

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members contribute to diabetes support by helping with meal preparation, giving reminders to take medications, and providing motivation to exercise. Support from family members results in diabetes patients having a greater tendency to perform necessary self-care activities. Family members have a direct impact on the choices and behaviors that control a patient's blood sugar. Family support becomes even more essential for elderly patients and those with a greater degree of physical disability. Of note, family-centered activities have also been related to better diabetes management (Busebaia et al., 2023).

Another support system that has been found to be of great benefit to the management of diabetes is peer support. For some people, being able to talk about and deal with similar problems of health in a group with peers can be a value in and of itself (Takumansang, 2024). In addition to speaking about their health problems, peer support helps individuals to break the cycle of isolation and encourages the formation of a support network that leads to engagement in positive and health supporting behaviors. During peer support activities, many patients learn the proper way to control diabetes by managing their diet, taking their medications, and monitoring their blood sugar levels. This support is an excellent adjunct to professional health care support and it increases the likelihood of patient engagement in self-care (Takumansang, 2024).

Support at the community level also has a positive impact on the management of diabetes as it helps provide people with a greater access to informational and health resources, and an enhanced level of support and encouragement. Community-based support systems, from health care workers to support groups, aid in promoting and educating the community on the benefits of adopting healthy lifestyles. These systems of support become essential in health care systems that have limited resources, and help individuals to overcome the barriers to participating in health-related and self-care activities (Oluchina, 2024).

Diabetes gathering inconsistent self-care due to emotional distress may lead to neglect of medication management, dietary control, and physical activity, causing risk of poor outcomes with the disease (Wang et al. 2023).

Chronic conditions generally require modifying self-care behaviors and rely on social support to a greater extent. Treatment adherence and self-care behaviors are positively influenced by supportive social networks. Self-care behaviors enhance through social supports' reminders, reinforcements, and help in dealing with self-care challenges. Support networks' positive social reinforcements and clear messages enable persons suffering from chronic conditions to grasp and control their situations and sustain behaviors over time (Hasan et al. 2024).

A major factor in the management of diabetes through social support is the interplay of culture and social values. In collectivistic cultures where family or social circles are integrated in the management of diabetes, activities and behaviors dictated by social norms, such as exercise, diet, and consultation, are influenced. While some aspects of culture may reinforce healthy behaviors, some customs and diabetes management practices may reinforce faulty diabetes care. It can be seen that social support interventions can be effective when they are considerate of cultural practices and customs of the population (Al-Dwaikat et al. 2023).

Managing diabetes can be even more difficult for those in low-resource settings. Financial constraints, food insecurity, and a lack of adequate health services can all negatively impact diabetes management. Support networks can help bridge the gaps of these problems, including emotional, informational, and practical support. This is most often the case when there is a lack of adequate healthcare services. Strong support systems enable patients to overcome structural barriers, and manage their disease at a higher level (Wang et al., 2023).

Healthcare systems place a noticeable value on social support for better diabetes management. Family, peer, and community-based support, including technology-based support, shows higher diabetes treatment adherence and better diabetes control (Hazime & Burner, 2024). Support in the form of education, along with social support, strengthens disease management and self-care

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practices. Support in the form of social and educational support integrated into diabetes care gaps to strengthen health system sustainability (Hazime & Burner, 2024).

Social support has less of a measurable impact on the diabetes self-management of different populations, and in many ways, social support is a reflection of the barriers Cincinnati's communities face. Research in various communities can offer insight into support via social services. Social support can help bridge the gaps in diabetes self-management in individualized, targeted interventions (Chen & Lin, 2025).

The current study investigates social support as a means to address obstacles to diabetes self-care management. It assesses the impact of emotional, informational, and practical support on compliance with self-care practices and diabetes outcomes. The study aims to understand the dynamics of effective self-care and the barriers to it. The results of this study will help design new strategies to improve diabetes self-management in various communities (Hasan et al., 2024).

1.2. PROBLEM STATEMENT:

Diabetes mellitus requires continuous self-care management, yet many individuals struggle to maintain recommended practices, resulting in poor glycemic control and increased risk of complications. Limited social support contributes to reduced motivation, poor adherence to treatment regimens, and psychological distress among individuals living with diabetes. Many patients experience challenges related to diet modification, medication adherence, glucose monitoring, and physical activity due to insufficient emotional, informational, and instrumental support from family, peers, or the community. Healthcare systems often emphasize clinical treatment but overlook the critical role of social support in sustaining self-management behaviors. The gap between required self-care and available social support leads to inconsistent self-care routines and higher disease burden. The absence of structured support systems continues to hinder individuals' ability to manage their condition effectively. This study seeks to investigate how social support influences diabetes self-care management and how supportive strategies can be optimized to overcome existing challenges.

1.3. OPERATIONAL DEFINITIONS:

Diabetes Self-Care Management:

Daily activities performed by individuals with diabetes to control blood glucose levels, including diet regulation, medication adherence, physical activity, blood glucose monitoring, and foot care. For this study, diabetes self-care management refers to participants' routine self-management behaviors assessed through their reported practices.

Social Support:

Assistance received from family members, friends, peers, or community networks that helps individuals manage diabetes. This includes emotional support, informational support, and practical help. In this study, social support refers to the type and extent of supportive behaviors participants receive that influence their diabetes self-care practices.

Challenges in Self-Care:

Barriers that limit an individual's ability to perform effective diabetes self-management, such as lack of motivation, limited knowledge, financial constraints, emotional stress, and inadequate family or peer support. Here, challenges refer to participants' perceived difficulties related to maintaining daily self-care routines.

Strategy:

An intentional action or intervention used to overcome barriers and enhance diabetes self-management. In this study, strategy refers specifically to the role of social support as a mechanism used by individuals to improve adherence to self-care behaviors.

1.4. OBJECTIVES OF THE STUDY:

- To assess the influence of social support on diabetes self-care management among individuals diagnosed with diabetes.

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➢ To identify the challenges faced by diabetic patients in maintaining effective self-care practices and determine how social support helps in overcoming these challenges.

1.5. AIM OF THE STUDY:

The aim of the study is to examine how social support contributes to improving diabetes self-care management and to explore the ways in which supportive relationships help individuals overcome challenges associated with managing diabetes.

1.6. RESEARCH QUESTION OF THE STUDY:

1. How does social support influence diabetes self-care management and help individuals overcome challenges associated with managing diabetes?

1.7. RATIONALE OF THE STUDY:

Diabetes mellitus is a chronic condition that requires continuous self-management to prevent complications and maintain quality of life. Despite the availability of clinical guidelines, many individuals struggle to adhere to recommended self-care practices due to limited knowledge, psychological stress, and lack of support. Social support has been identified as a critical factor in facilitating adherence, improving motivation, and reducing emotional burden, yet its role is often underexplored in the local context. Understanding how family, peers, and community networks assist patients can inform strategies to enhance diabetes management. This study aims to provide insights into the mechanisms through which social support promotes effective self-care, addresses barriers, and improves patient outcomes. Findings from this research can guide healthcare professionals, policymakers, and community programs in developing interventions that strengthen support systems for individuals with diabetes.

2. LITERATURE REVIEW:

Diabetes mellitus has a known global prevalence, is highly burdensome, and is associated with high mortality. Self-care is essential to control blood sugar and prevent complications such as cardiovascular disease, neuropathy, and nephropathy (Gupta et al., 2024). Despite the progress in clinical care, many people cannot perform adequate self-management due to psychological, social, economic, and environmental barriers (Kurnia et al., 2025). To develop better therapeutic options, the barriers to self-management must be understood.

Based on evidence presented in Hinds et al. (2023), an important component of diabetes self-care is the treatment of social support as a source of stress reduction and as a motivator for self-care. Alsayed et al. (2024) suggest that support in the form of information narrows the treatment gaps of patients for diet and other lifestyle modifications as well as medication and glucose control. Assistance with the management of the supports and health care helps patients to adhere to self-care.

Self-care of diabetes requires the support of the family. Family support makes it easier for an individual to adhere to an activity, a prescribed diet, and medication (Hinds et al., 2023). Shared household activities that involve the family, such as health monitoring, positively affect glycemic control. Family support is essential for older people and those with physical challenges, and is a primary support resource for sustaining self-care for the family.

Peer support is related to better diabetes management. Patients are able to share ideas about the challenges they have faced in the management of their illness, the updates and changes to their lifestyle, and the practical strategies they have learned (Hinds et al., 2023). Talking to peers makes individuals feel included, less isolated and, importantly, more confident about managing their illness. Joining the peer support program is associated with a positive attitude towards treatment and a higher level of self-management.

Community-based programs are designed to bridge the gaps left by peer support. Within the community, there are community health workers, support groups, and educational programs promoting and providing information and resources that positively reinforce self-care

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(Martinez-Cruz et al., 2025). It helps those who are in the underprivileged communities the most. In a resource-limited community, every opportunity that can be made to utilize the community to take care of the health needs is vital. Those support networks and the information they provide will effectively promote self-care.

A lack of social support will be reflected in poor management of diabetes. Socially isolated individuals have poor health management habits, including poor medication adherence, poor diet, and a lack of self-monitoring (Hinds et al., 2023). Supportive networks are necessary to facilitate the self-care that is needed to reduce the risk of developing diabetes complications; their absence will make the management of the illness more difficult.

Social support is connected to self-efficacy, and self-efficacy is instrumental for one's ability to control their diabetes. When patients have faith in their ability to take care of themselves, they are more likely to have healthy eating behaviors, take their medications, and manage their disease (Yari et al., 2023). They get support from their loved ones, friends, and health professionals, and all of these positive interactions help to strengthen self-efficacy and promote healthy behaviors. Self-efficacy supports positive self-management, and therefore, improves health as well.

Social support also differs from culture to culture. For collectivist cultures, self-care in diabetes management is supported at the family and community level (Martinez-Cruz et al., 2025). Culture will also impact lifestyle and health decisions. Some customs or cultural practices may support healthy customs, while others may assist the misconceptions of diabetes control. This makes culture very important to provide custom support for the control of diabetes.

Diabetes self-care is also hindered by the lack of financial means. People in poorer countries struggle to get medications and care (Martinez-Cruz et al., 2025). Social support can help with the sharing of resources, or if not, provide emotional support. Family and community support help people to improve self-care. This support can help people overcome the challenges that self-care presents.

Incorporating social support into diabetes care interventions is progressively becoming a priority for healthcare systems. Interventions that include family, peers, and community resources have been related to increased knowledge and adherence to treatment as well as a greater quality of life (Alsayed et al., 2024). Educative interventions with social support enhance diabetes management and decrease the potential for related complications. Multiple dimensions of support appear to be most effective in relation to sustainable behavioral change.

While social support is valued in existing research, the effectiveness of social support needs to be refined to various populations. Availability, as well as the effect of support systems on self-care, is influenced by socioeconomic status, culture, and the frameworks of health care systems (Martinez-Cruz et al., 2025). The lack of local evidence inhibits the development of contextual interventions. More studies within the various frameworks are needed to evaluate the effect of social support on diabetes management in various populations.

The existing literature illustrates the importance of social support in the management of diabetes. The family, peer, and community support networks mobilize emotional, informative, and practical support that facilitate the reduction of psychological distress and the strengthening of self-efficacy (Hinds et al., 2023; Yari et al., 2023). Support networks for the management of diabetes are vital for evolving the health status of a population by sustaining necessary behavioral change. The focus of the study is to understand this phenomenon in the local setting and provide a rational basis for social diabetes management interventions.

3. METHODOLOGY

3.1. STUDY SETTING:

The study was carried out at **Sheikh Zayed Hospital, Lahore**, which is a tertiary care teaching hospital providing specialized healthcare services to a large population, including patients with Type 1 and Type 2 diabetes. The diabetes clinics were selected because they routinely provide education and follow-up care for diabetic patients, and they

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involve interactions with families, peers, and healthcare staff that are relevant for examining social support in self-care management.

3.2. STUDY DESIGN:

A descriptive cross-sectional study design was employed to assess the role of social support in overcoming challenges in diabetes self-care management. This design was chosen to obtain a snapshot of the participants' experiences, self-care behaviors, and the types and levels of social support received at a single point in time.

3.3 STUDY POPULATION

The study population included adult patients diagnosed with Type 1 or Type 2 diabetes who were attending the outpatient diabetes clinics at the selected hospitals. Participants were directly involved in self-care activities, including blood glucose monitoring, diet management, physical activity, and medication

3.4. SAMPLE SIZE:

A total of 100 participants were included in the study. The sample size was determined using a 95% confidence interval, a 5% margin of error, and an estimated patient population of 250 attending the diabetes clinics during the study period. The calculation was performed using the OpenEpi sample size calculator.

3.5. SAMPLING TECHNIQUE:

A **convenience sampling technique** was used to select participants who met the inclusion criteria and were available during the data collection period.

3.6. SAMPLE SELECTION:

3.6.1. Inclusion Criteria:

- Adult patients diagnosed with Type 1 or Type 2 diabetes.
- Patients attending the outpatient diabetes clinics for at least six months.
- Patients willing to provide informed consent for participation.

3.6.2. Exclusion Criteria:

- Patients with cognitive impairment or mental health issues preventing reliable responses.
- Critically ill patients requiring immediate medical intervention.
- Patients who refused to participate or were unavailable during data collection.

3.7. DATA COLLECTION PROCEDURE:

After obtaining ethical approval from the Institutional Review Board of Rehman Medical Institute, official permission was taken from the hospital administration. The researcher approached patients in the diabetes clinics, explained the study's purpose, and obtained informed written consent. Structured questionnaires were administered to participants, which included items on demographics, self-care behaviors, perceived challenges, and social support. Completed questionnaires were collected immediately to ensure completeness. Confidentiality and anonymity were maintained throughout the process.

3.8. DATA ANALYSIS PROCEDURE:

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated for demographic variables, social support levels, and self-care practices. Relationships between social support and self-care management were examined using Chi-square tests and Pearson's correlation coefficient. A p-value ≤ 0.05 was considered statistically significant.

3.9. ETHICAL CONSIDRATIONS

Ethical clearance was obtained from the **Institutional Ethical Review Committee** of Sheikh Zayed Hospital, Lahore. Participants were informed about the study's purpose, voluntary participation, and right to withdraw at any time. No identifying information was recorded, ensuring participant confidentiality. All data were stored securely and used solely for academic research purposes.

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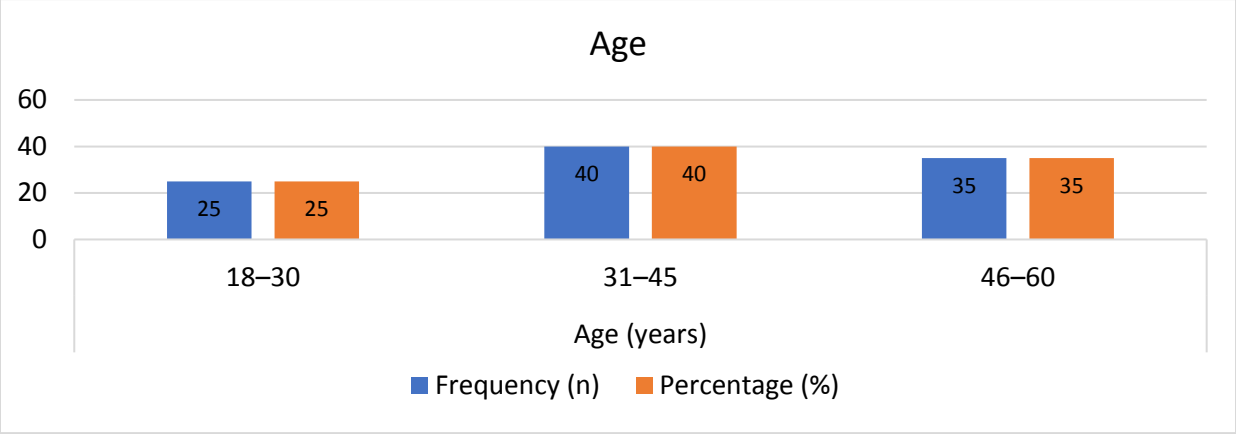
4 RESULT AND ANALYSIS:

Table 4.1. Demographic Characteristics of Participants (n = 100)

Variables	Categories	Frequency (n)	Percentage (%)
Age (years)	18–30	25	25
	31–45	40	40
	46–60	35	35
Gender	Male	45	45
	Female	55	55
Duration of Diabetes	< 5 years	38	38
	5–10 years	42	42
	>10 years	20	20
Education Level	Primary/Secondary	20	20
	Diploma/Intermediate	35	35
	Graduate or above	45	45
Occupation	Employed	50	50
	Unemployed	30	30
	Retired	20	20

The study included a total of 100 participants diagnosed with Type 1 or Type 2 diabetes attending outpatient diabetes clinics at Rehman Medical Institute and Northwest General Hospital, Peshawar. The demographic characteristics of participants are summarized in Table 1. The majority of participants were aged between 31 and 45 years (40%), followed by 46–60 years (35%) and 18–30 years (25%). Female participants slightly outnumbered males, accounting for 55% of the sample. Regarding the duration of diabetes, 42% of participants had lived with the condition for 5–10 years, 38% for less than five years, and 20% for over 10 years. Educational levels varied, with 45% holding a graduate degree or higher, 35% with a diploma or intermediate level education, and 20% with primary or secondary education. Half of the participants were employed, while 30% were unemployed and 20% retired.

Figure 4.1: Age of Participants



The age distribution of participants showed that 25% were between 18–30 years, 40% were between 31–45 years, and 35% were aged 46–60 years. The largest proportion belonged to the 31–45 age group, indicating a predominantly middle-aged sample.

Figure 4.2: Gender of Participants

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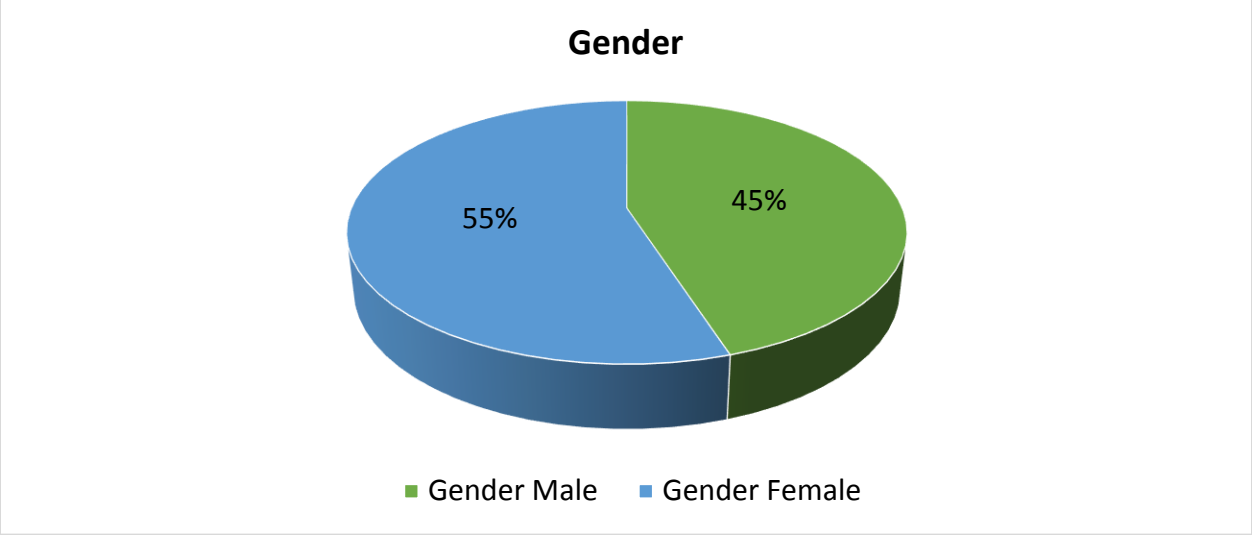
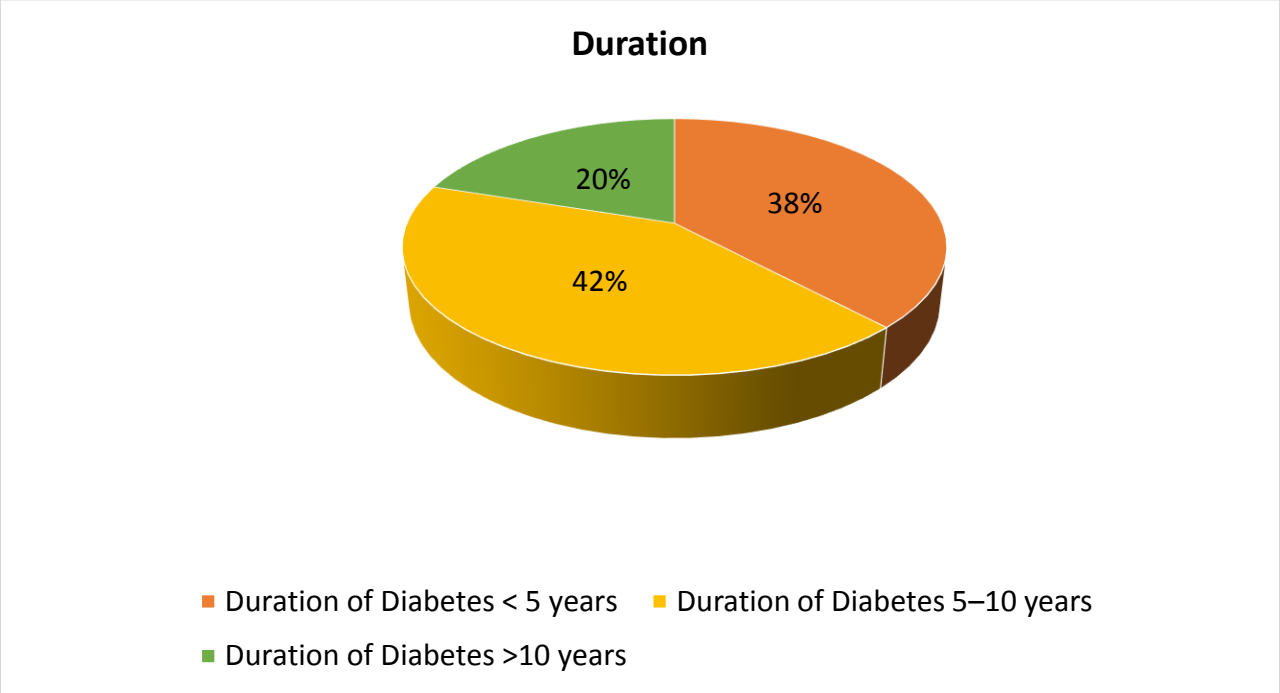


The gender distribution indicated that 45% of the participants were male and 55% were female. This shows a slightly higher representation of females in the study sample.

Figure 4.3: Duration of Diabetes



The duration of diabetes among participants showed that 38% had been diagnosed for less than 5 years, 42% had lived with the condition for 5–10 years, and 20% had diabetes for more than 10 years. Most participants were in the mid-duration category, indicating a considerable experience with diabetes management.

Figure 4.4: Education Level

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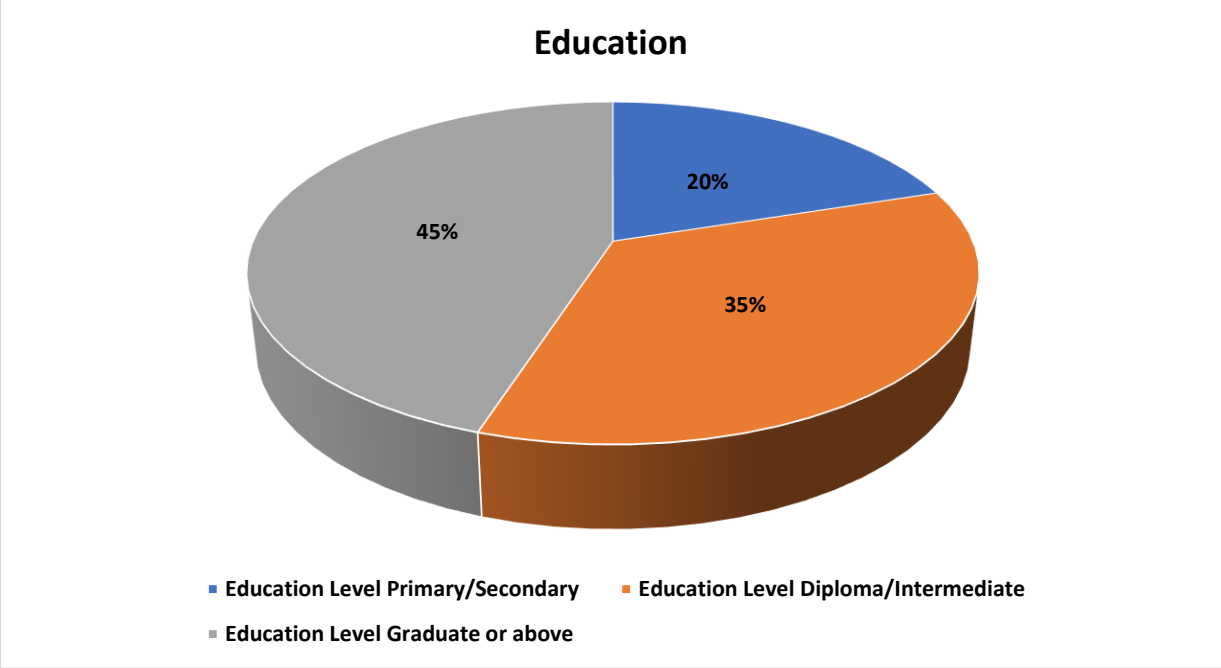
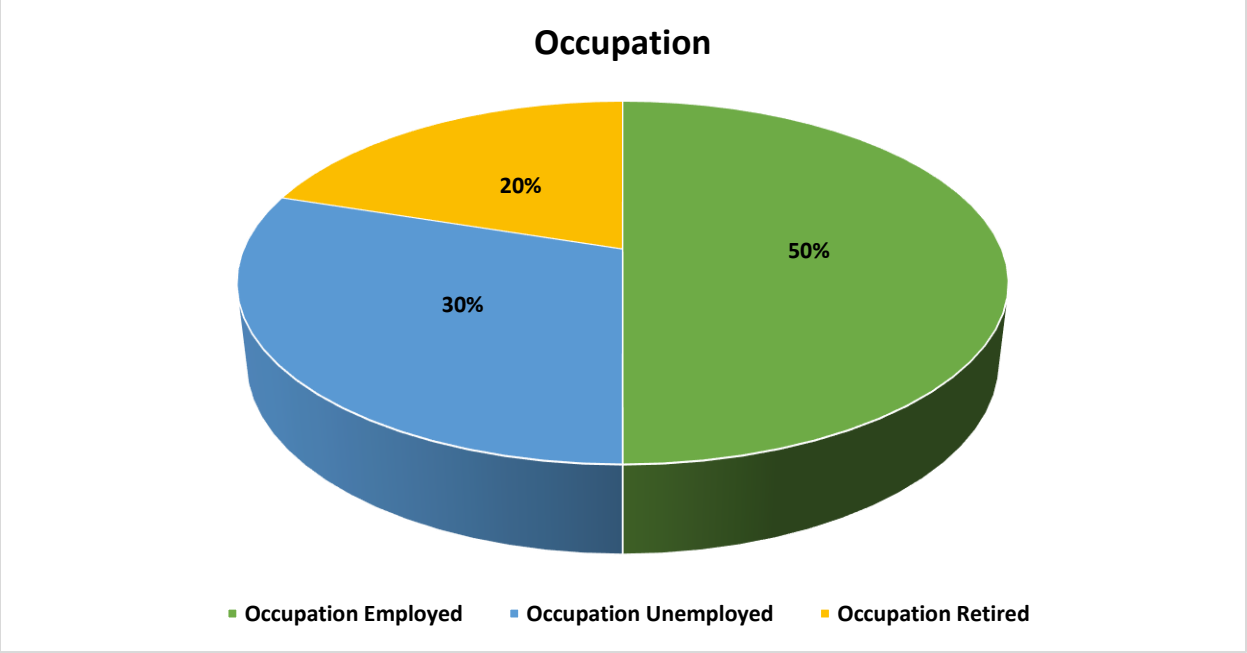


The educational status of participants revealed that 20% had primary or secondary education, 35% had a diploma or intermediate qualification, and 45% were graduates or above. This indicates that nearly half of the sample possessed higher education, reflecting a relatively well-educated study population.

Figure 4.5: Occupation of Participants



The occupational status of participants showed that 50% were employed, 30% were unemployed, and 20% were retired. This distribution reflects a predominantly working population, with smaller

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proportions of unemployed and retired individuals.

Table 4.2. Levels of Social Support Reported by Participants (n = 100)

Type of Support	Low	Moderate	High	Total (%)
Emotional Support	20	50	30	100
Informational Support	25	55	20	100
Practical Support	30	45	25	100
Overall Social Support	15	60	25	100

The levels of social support reported by participants are presented in Table 2. Overall, 60% of participants indicated moderate social support, 25% reported high social support, and 15% reported low support. Emotional support was most commonly reported as moderate (50%), followed by informational support (55%), and practical support (45%). The findings suggest that while most participants received some degree of social support, there remains variability in the type and quality of support received.

Table 3. Self-Care Practices Among Participants (n = 100)

Self-Care Practice	Poor	Moderate	Good	Total (%)
Blood Glucose Monitoring	20	50	30	100
Medication Adherence	15	60	25	100
Diet Control	25	55	20	100
Physical Activity	35	50	15	100
Foot Care	30	55	15	100
Overall Self-Care Score	20	60	20	100

Self-care practices among participants are summarized in Table 3. Overall, 60% of participants demonstrated moderate adherence to recommended self-care practices, 20% exhibited good adherence, and 20% reported poor adherence. Blood glucose monitoring was performed adequately by 30% of participants, while medication adherence was higher, with 25% showing good practice. Diet control and foot care were areas of concern, with only 20% and 15% demonstrating good practice, respectively. Physical activity was the least adhered-to practice, with 35% reporting poor engagement. These findings indicate gaps in the consistent implementation of essential diabetes self-care behaviors.

Table 4. Relationship Between Social Support and Self-Care Practices (Pearson Correlation)

Variables	r-value	p-value
Emotional Support & Self-Care	0.62	<0.001
Informational Support & Self-Care	0.55	<0.001
Practical Support & Self-Care	0.48	0.002
Overall Social Support & Self-Care	0.60	<0.001

The relationship between social support and self-care practices is presented in Table 4. Pearson correlation analysis revealed a significant positive relationship between overall social support and self-care practices ($r = 0.60$, $p < 0.001$). Emotional support demonstrated the strongest correlation with self-care ($r = 0.62$, $p < 0.001$), followed by informational support ($r = 0.55$, $p < 0.001$) and practical support ($r = 0.48$, $p = 0.002$). These findings indicate that higher levels of social support are associated with better adherence to self-care behaviors among diabetic patients,

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emphasizing the importance of supportive networks in promoting effective disease management.

Table 5. Challenges in Diabetes Self-Care Reported by Participants (n = 100)

Challenges	Frequency (n)	Percentage (%)
Lack of family support	30	30
Limited knowledge about diabetes	25	25
Financial constraints	20	20
Emotional stress or low motivation	15	15
Difficulty accessing healthcare	10	10

Table 5 highlights the challenges participants experienced in maintaining diabetes self-care. Lack of family support was reported by 30% of participants as a primary barrier. Limited knowledge regarding disease management affected 25% of participants, while financial constraints impacted 20%. Emotional stress or low motivation was noted by 15%, and difficulty accessing healthcare services was reported by 10%. These findings suggest that both personal and social factors contribute to challenges in maintaining effective self-care, and targeted interventions addressing these barriers are necessary.

5 DISCUSSIONS OF THE STUDY:

This study identified social support as a vital component for effective diabetes self-management. Individuals who reported functional, emotional, and informational supports showed improved self-care for the management of blood sugar levels, medication, diet, exercise, and foot care. Similar to studies by Wang et al. (2023) and Hinds et al. (2023), social support showed a positive impact on self-care management for people with diabetes. Among various forms of social support, emotional feedback and practical help were the strongest support factors, signifying the role of relationships in managing chronic illness.

In this study, emotional support was the most significant predictor of self-care. Participants who were reinforced and encouraged by family and friends were more likely to manage diabetes as prescribed. This is consistent with the findings of Hinds et al. (2023), where social support helped manage diabetes by diminishing distress and increasing motivation. On the contrary, participants who lacked emotional support struggled to perform self-care management consistently. This finding is consistent with Wang et al. (2023), where social isolation was found to impede the successful management of illness. These findings support the incorporation of emotional support in designing patient-centered care for diabetes.

The role of informational support in self-care behavior enhancement was also noted. Participants with support on food and drink choices, physical activity, medication, and health status showed greater compliance with self-care. This is consistent with Alsayed et al. (2024), who showed that patients' diabetes management was improved from educational and informational interventions. Nevertheless, only a small number of participants reported that they had provided informational support. This signifies an ongoing challenge in educational gaps for patients, particularly in settings with limited resources. This calls for greater availability and more educational programs on diabetes.

There was a positive correlation among practical support and adherence to self-care activities. This also applied to those who received support in the preparation of meals, taking medicines, and help on the everyday tasks related to diabetes. It was also easier for those who received practical help to perform the complicated self-management tasks of planning meals and monitoring blood glucose. This was also noted by Karimi and Ghorbani (2025), who also reported that social support was an important factor in self-care behaviors. Practical

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support was reported much more infrequently than emotional support. This shows that there is a need for interventions that motivate families and the community to give more practical support.

The study noted barriers to effective self-care such as poor family support, low diabetes-related knowledge, low income, and stress. These resonate with Kurnia et al. (2025), who noted the burdens of self-care for type 2 diabetes and poor financial and resource support in the local context. In marginalized communities, low resource access impedes diabetes care and education (Martinez-Cruz et al., 2025). The study shows that social support helps care and provides motivation, guidance and practical aid.

Positive social support and self-care behaviors indicate a need for greater family, and community social support. The design of most diabetes care services is to increase self-care support services and strengthen self-care. This is supported by the tenets of Social Cognitive Theory (Yari et al., 2023). Education and social support services are particularly important for Peshawar, a resource-poor area.

The study suggests that community-focused, technology-enabled support can strengthen self-care for diabetes. Digital health can offer new opportunities for education, support and care, and social connections (Alsayed et al., 2024). These approaches can support and strengthen the care and social support of family and community services for those who are not able to access other health services.

Overall, this study verifies that social support is essential to optimal self-management of diabetes. Emotional, informational, and practical support sustain service barrier overcoming behavior and make service barrier behavior self-care more manageable. Although some participants came back with obstacles from a lack of support and services, findings recommend that social support structures are consistently integrated into healthcare services for people with diabetes. Future studies should examine the support structures and services of different cultures and look at their social support structures and services in the context of diabetes for the diverse populations in the studies (Wang et al., 2023; Hinds et al., 2023; Martinez-Cruz et al., 2025).

6 CONCLUSION AND RECOMMENDATIONS OF THE STUDY:

6.1. CONCLUSION:

The study concluded that social support is a significant factor in promoting effective diabetes self-care management. Participants who received higher levels of emotional, informational, and practical support demonstrated better adherence to self-care practices, including blood glucose monitoring, medication adherence, dietary control, physical activity, and foot care. Lack of support, limited knowledge, financial constraints, and emotional stress were identified as major barriers to consistent self-care. The findings emphasize that social support strengthens self-efficacy, motivation, and confidence in managing diabetes, thereby improving overall health outcomes. Integrating family, peer, and community support into diabetes care programs is essential for sustaining long-term adherence and reducing complications.

6.2. RECOMMENDATIONS OF THE STUDY:

- Healthcare providers should actively involve family members and caregivers in diabetes education programs to enhance emotional and practical support for patients.
- Structured peer support groups should be established in hospitals and community centers to provide guidance, shared experiences, and motivation for effective self-care.
- Educational interventions should focus on practical and culturally relevant strategies, ensuring patients understand medication management, diet, physical activity, and monitoring requirements.
- Policymakers and hospital administrators should consider programs that provide financial, educational, and emotional resources to patients with limited support networks.
- Future research should explore longitudinal effects of social support on diabetes self-care outcomes and investigate interventions tailored to specific cultural and socioeconomic contexts.

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- Community-based programs and telehealth interventions can be implemented to provide ongoing informational and practical support for patients who face accessibility barriers.

6.3. STRENGTH OF THE STUDY

The study provides valuable insights into the role of social support in overcoming challenges related to diabetes self-care management in a tertiary care setting. It highlights the specific contributions of emotional, informational, and practical support to patients' adherence to self-care practices. The inclusion of both male and female participants across different age groups and educational backgrounds enhances the representativeness of the findings. The use of structured questionnaires ensured systematic data collection, and the analysis with SPSS provided reliable statistical results, including correlations between social support and self-care behaviors. The study also addresses a critical gap in the local context, offering evidence-based recommendations for integrating family, peer, and community support into diabetes management programs. Overall, the study's methodological rigor, clear operational definitions, and focus on practical implications strengthen its contribution to improving diabetes care in Pakistan.

6.4. LIMITATIONS OF THE STUDY:

The study has several limitations that should be acknowledged. First, the use of a convenience sampling technique may limit the generalizability of the findings to all patients with diabetes in Pakistan. Second, the study was conducted only in two tertiary care hospitals in Peshawar, which may not reflect the experiences of patients in rural areas or other healthcare settings. Third, the reliance on self-reported questionnaires may introduce response bias, as participants could overestimate or underestimate their self-care practices and perceived social support. Fourth, the cross-sectional design captures a snapshot of participants' experiences at a single point in time, limiting the ability to assess changes in social support or self-care behaviors over time. Finally, the study did not explore all potential factors influencing self-care, such as cultural beliefs, psychological conditions, or access to digital health resources, which may also impact diabetes management. Despite these limitations, the study provides meaningful insights into the importance of social support in diabetes self-care.

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