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The Effect of Social Support on Self-Care Activities and Emotional Distress Among Diabetic Patients

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Abstract

The study examined how social support affected self-care activities and emotional distress among 200 purposively selected diabetic patients. The Multi-dimensional Scale of Perceived Social Support (Zimet et al., 1988), Diabetes Distress Scale (Polonsky et al., 2005), and Mindful Self-Care Scale (Cook-Cottone & Guyler, 2024) were operationalised and quantified to measure the study's dimensions. Pearson correlation revealed a significant positive correlation between social support and self-care activities, and a negative correlation between social support and emotional distress. Multiple regression analysis demonstrated that perceived social support and its factors, i.e., Significant Others, Family, and Friends, were non-significant predictors of emotional distress and self-care activities. The present study's limitations, suggestions, and practical ramifications have also been discussed.

Keywords: Perceived Social Support, Diabetes Distress, Mindful Self-Care Scale.

Introduction

Diabetes mellitus is a complex group of metabolic illnesses that cause chronic hyperglycemia due to insulin secretion, action, or both. Modern research shows that diabetes phenotypes are heterogeneous and diverse, despite being categorised into type 1 and type 2 (Ahlqvist et al., 2018; Bando, 2024). Type 1 diabetes, which affects children and teenagers, causes insulin insufficiency by destroying the pancreatic beta cells. Insulin resistance and relative insulin insufficiency characterise type 2 diabetes, which is more common in adults. Diabetes is spreading worldwide. The International Diabetes Federation (2023) estimated that 537 million adults had diabetes in 2021, and this number is projected to rise to 783 million by 2045. This rising frequency has serious psychosocial and public health effects. People with diabetes are more likely to develop depression, anxiety, and eating disorders (Tutlam et al., 2023). Chronic stressors can cause emotional strain, frustration, and a decline in overall well-being (Gan et al., 2024). Diabetes's psychological and physiological effects are mitigated by social support. Psychosocial, informational, and practical support from family, friends, and peers can enhance coping, treatment adherence, and overall

quality of life. Gamst-Jensen et al. (2023) found that perceived social support is associated with reduced depression, anxiety, improved self-management, and better glycemic control. The modern concept defines social support as the extent to which one believes emotional, informational, or instrumental aid from other people is available to them (Al-Dwaikat et al., 2023). People with good relationships, whether with family, friends, or those around them, are more able to withstand stress and have a better psychological adjustment (Beverly et al., 2020). These people, as a group, tend to be much more resilient in the face of adversity, as the relationships provide them with a sense of being valued and cared for, both essential components in the perception of social support. Social cognition and symbolic interactionism provide distinct perspectives on how people perceive and define support. These two viewpoints share a sociological basis, but current research reveals methodological variations in support interpretation across cultures and individuals. According to social constructionist theory, support is situational and based on human experience (Al-Dwaikat et al., 2023). Studies show that perceived support improves regimen adherence, self-efficacy, and health outcomes (Onu et al., 2025). Perceived support boosts psychological resilience and empowers self-management (Al-Dwaikat et al., 2023). Social connections meet more general psychological, social, and behavioural needs throughout the lifespan as well. They are inversely correlated with lower morbidity and mortality, a fact that has been repeatedly cemented through epidemiological research at the population level (Azmiardi et al., 2022). This lends support to the buffering hypothesis, which posits that social support may reduce the perceived stressfulness by facilitating more positive cognitive appraisals (Smith & Anderson, 2024). Supportive social exchanges can include practical support, such as lending a hand with food or offering a loan. Still, they can also serve as reassurance, empathy, or simply the knowledge that help would be available if needed, and each can help alleviate some of the emotional strain of dealing with life's problems (C. Lin et al., 2025). The lack or misuse of aid can do just as much damage. T2DM patients with insufficient social support systems commonly experience a higher degree of emotional distress, anxiety, and depression. These feelings may also compromise treatment adherence; therefore, a vicious cycle may exist between inadequate adherence to treatments and poor health. On the other hand, a supportive environment can also offer emotional confirmation, practical help and the encouragement to continue with challenging routines (Onu et al., 2025). Emotional distress is often associated with depression and anxiety: lack of motivation, despair, and withdrawal from the world. The latter may be accompanied by somatic symptoms such as difficulty sleeping, fatigue, poor appetite, a bloated head, and nausea, which can vary greatly across cultures as a means of expressing one's emotional suffering (Jafari et al., 2024). Emotional suffering has also been reported as decreased enthusiasm for life, frequent crying, disturbed sleep, and a sense of futility/ hopelessness. In its worst form, it can lead to thoughts of self-harm and loss of interest in previously pleasurable activities (Nasr et al., 2025). Academics concur that emotional distress is a combination of internal pain and external social conflict, which is shaped by cultural contexts and characterised by recurrent negative emotions, including sadness, fear, and concern (Balani, 2024). Interpersonal theories suggest that inhibitory and internalising problems arise from faulty social interactions. From this perspective, negative behaviour such as emotional distress often arises from a failure in a relationship, isolation or lack of support, an Unsociable environment because human beings are social creatures (Onu & Igwe, 2024). The cognitive model, too, is a theory which interprets emotional distress in terms of biased thought processes. For example, people with psychological distress may magnify stressors or exhibit a chronic tendency to think badly of themselves, the world or the future. This triad is related to psychological dysfunction and affective dysregulation (Abbas et al., 2023). This set of frameworks provides a rich and detailed understanding of the nature, causes and processes involved in the experience of psychological distress. Emotional

distress is particularly prevalent in T2DM. Diabetes distress, the emotional struggle related to managing a demanding, chronic illness, can result in discouragement, burnout and feelings of failure even with one's best efforts to follow one's health regimen. Ongoing monitoring of blood glucose and control is considered an additional measure for diabetic lifestyle regulation (Kader et al., 2023). Numerous people complain of exhaustion, not only emotionally but also physically, from continuous monitoring of blood glucose levels; therefore, it is evident that diabetes distress is not only prevalent, but it also has a great impact. It has been reported to significantly affect quality of life, decrease self-care activities, and cause suboptimal glycemic control (Jafari et al., 2024). When patients believe that their best is not enough, they can become disheartened, anxious, and depressed, thus perpetuating the deleterious cycle of emotional well-being and physical disease (Qian, 2023). Evidence from a meta-analysis indicates that people with elevated diabetes distress are less likely to participate in necessary self-care activities like monitoring blood sugar, engaging in physical activity, and taking medication (Nasr et al., 2025). Emotional fatigue reduces energy and creates a desire for overeating or drug use, and can cause glycaemia abnormalities leading to depressive and anxious symptoms that are heightened (Balani, 2024). Psychological therapies have been applied in the management of distress. For instance, cognitive behavioural therapy (CBT) reduced diabetes distress, depressive symptoms and health anxiety and enhanced adherence to treatment and general well-being in patients with T2DM in the context of a randomised controlled trial (Abbas et al., 2023). Thus, knowledge about the interplay of cognitive, interpersonal, and behavioural dimensions becomes important to provide support and help individuals with diabetes, and to foster mental health and good self-regulation. Self-care is what people do for themselves to establish and maintain their health, and to prevent and deal with illness. It is a broad concept encompassing hygiene, nutrition, lifestyle, environmental factors, socio-economic factors, and self-medication. This includes personal hygiene, nutrition, home environments, socio-economic variables, and belief systems, as well as the use of self-care practices. Initially, studies examined the demographic, biomedical, and social determinants of patient behaviour and found these to be weak predictors of self-care. However, psychological models, in particular the HBM and the SRM, provide a powerful explanation.

Rationale

The present study examined how social support affects diabetic patients' emotional suffering. Another goal of this study was to examine the self-care practices of individuals with diabetes. The analysis of related literature suggests that diabetes is a serious and prevalent illness escalating worldwide. According to the IDF Diabetes Atlas, nearly 463 million people are believed to suffer from diabetes, ranking it among the top ten causes of death for adults. Moreover, the NDSP revealed that Pakistan has over 27.4 million diabetes cases, positioning it among the top ten nations facing the sharpest increases in prevalence of the condition. Pakistan ranks among the top 10 countries globally with the highest number of people living with diabetes. A meta-analysis found a pooled prevalence of 13.7% among adults, with even higher rates in urban areas (Basit et al., 2019). This growing burden demands targeted research to understand local risk factors and trends. There are significant differences in diabetes prevalence between urban and rural populations (15.1% vs. 1.6%) and between men and women (Shera et al., 1999; WHO, 2020). Studying these disparities helps tailor interventions to specific communities and demographics. A scoping review revealed that poor glycemic control affects up to 86.4% of diabetic patients in Pakistan, and 46–70% have inadequate knowledge about their condition (Khowaja et al., 2022). This highlights the need for research into education, treatment adherence, and culturally appropriate interventions. Diabetes imposes a significant financial burden on individuals and the healthcare system. Many patients face complications like retinopathy, nephropathy, and neuropathy due to delayed diagnosis and poor

management (IDF, 2024). Pakistan lacks a national diabetes registry and comprehensive operational policies for diabetes care, according to WHO profiles (WHO, 2020). As of 2024, Pakistan has approximately 34.5 million adults living with diabetes, making it the country with the highest age-standardised diabetes prevalence in the world at 31.4% (IDF, 2024). However, a significant portion of these individuals are not receiving treatment. Around 43% of people with diabetes remain undiagnosed, particularly those with type 2 diabetes. Pakistan ranks fifth globally in terms of undiagnosed diabetes, with 26.9% of adults unaware of their condition (IDF, 2024). This suggests that only about half to two-thirds of diabetic patients are currently under treatment, though exact national treatment figures are not publicly available. This issue remains understudied within Pakistan. While notable psychological research has explored the mental effects precipitated by diabetes, further inspection is still warranted. For instance, one such examination led by Zahid (2008) focused on the negative psychological impacts of diabetes within a rural Pakistani community. The findings demonstrated high levels of distress afflicting these patients. Longer and more intricate sentences intermingled with shorter, simpler statements could render insights into how diabetes socially and emotionally affects diverse segments of the Pakistani population, especially among women. In addition, the present study plans to investigate several demographic variables of diabetic patients related to their illness. These demographic variables include age, gender, residential background, education, family system, and marital status. As the number of diabetic patients is increasing day by day, issues like emotional distress are also becoming common today. Therefore, there is a need to address this problem and gain a deep understanding of it. The objective of the current study is to investigate the relationships between Perceived Social Support, Emotional Distress, and Self-care Activities among diabetic patients. The following hypotheses were generated to achieve the said objective:

H1: Perceived social support and its dimensions would positively predict self-care activities and their sub-constructs among diabetic patients.
H2: Perceived social support and its dimensions would be a negative predictor of emotional distress and its sub-constructs among diabetic patients.

Method

Research Design & Sample

A cross-sectional survey research design was employed in this study.

Sample

A purposive sampling of 200 diabetes patients (Type 1 and Type 2 diabetes) from the outpatient department (OPD) wards of hospitals in two cities: Sargodha and Lahore. The sample comprises 108 men and 92 women aged 16–55, with a disease history ranging from three to four years. All the patients were knowledgeable about their disease and were in treatment with regular medication intake, insulin, and lifestyle adjustments. All were educated, with a minimum education level recorded as a high school diploma, and some held postgraduate degrees. Sixty-seven per cent of the samples were married, and 33% were unmarried. All were living in a joint family setup; however, 13% were living in rural areas, whereas 78% lived in urban areas, and their monthly family incomes ranged between 60,000/PKR and 2,50,000/PKR and above. The inclusion of participants from diverse demographic and clinical backgrounds in this study aimed to provide a comprehensive understanding of diabetic pain and self-care habits. This method expands the study's findings to a larger population of diabetic individuals in similar metropolitan settings.

Instruments

Short Multi-dimensional Scale of Perceived Social Support (Zimet et al., 1988): The 12-item, 7-point Likert scale measures an individual's experience of support from important others, family, and friends. The response format ranges from 1 (strongly disagree) to 7 (strongly agree), where higher scores indicate a higher perceived level of social support and vice versa. The literature reports its alpha reliability as 0.88 (Zimet et al., 1988).

Diabetes Distress Scale (Polonsky et al., 2005): The Diabetes Distress Scale was designed by Polonsky et al. in 2005. This is 17 items scale of four subscales i.e., emotional burden (items 1, 3, 8, 11, 14), physician-related distress (items 2, 4, 9, 15), regimen-related distress (items 5, 6, 10, 12, 16), and interpersonal distress (items 7, 13, 17). The scale employs a 6-point Likert response style, with 1 representing 'no problem' and 6 representing 'a serious problem', where higher scores indicate a higher level of diabetes distress and vice versa. The alpha reliability of the scale is 0.93 (Polonsky et al., 2005).

Mindful Self-Care Scale (Cook & Guyker, 2016): Cook and Guyker developed the Mindful Self-Care Scale (MSCS) in 2016. It is a comprehensive measure for assessing the frequency and efficacy of self-care actions in individuals. The MSCS is made up of 33 items divided into six subscales that target various aspects of self-care: physical care (8 items), supportive relationships (5 items), mindful awareness (4 items), self-compassion and purpose (6 items), mindful relaxation (6 items), and supportive structure (4 items). Participants score each issue on a 5-point Likert scale, ranging from 1 (never) to 5 (often). Items 6 through 8 are coded in reverse order. The alpha reliability of the measure is 0.89 (Cook & Guyker, 2016).

Procedure

The Departmental Ethical Review Board approved the research protocol, and the purposive sample of 200 diabetics (Type 1 and Type 2) was approached in the outpatient departments (OPDs) of hospitals in Sargodha and Lahore. They were informed about the purpose and objectives of the study, followed by written and oral consent for their participation. Confidentiality of data, as well as assurance of no physical, psychological, social, or financial harm, was also ensured for study participation. Genuine responses were requested from the study participants, and they were thanked at the end for their valuable time and input. After the completion of data collection, it was analysed using SPSS 23 to test hypotheses and draw conclusions.

Results

Variables	M	SD	α	PSS	SOSS	FaSS	FrSS	DD	EB	`	RRD	IPD	SCA	PC	SR	MA	SCP	MR	SS
PSS	45.77	8.73	0.62	1															
SOSS	15.67	4.12	0.5	.77***	1														
FaSS	15.72	4.18	0.5	.79***	.47***	1													
FrSS	14.38	3.72	0.24	.60***	.16*	.20**	1												
DD	57.33	6.77	0.49	-0.05	-0.03	-0.01	-0.07	1											
EB	16.01	2.82	0.06	-0.05	-0.05	-0.02	-0.04	.86**	1										
PRD	14.77	2.4	-0.31	0.02	0.01	0.06	-0.04	.60**	.23**	1									
RRD	17.1	2.08	-0.72	-0.07	-0.02	-0.07	-0.07	.78**	.62**	.26**	1								
IPD	9.4	1.48	-0.47	-0.06	-0.06	-0.01	-0.07	.82**	.79**	.29**	.55**	1							
SCA	128.8	18.78	0.94	0.01	0.01	-0.03	0.05	0.03	0.09	-0.09	0.06	0.03	1						
PC	26.25	8.29	0.83	0.01	0.01	-0.01	0.04	0.01	0.06	-0.12	0.07	0.03	.81**	1					
SR	22.3	1.97	0.7	-0.04	-0.06	-0.09	0.06	-0.07	-0.01	-.17*	0.01	-0.1	.61**	.73**	1				
MA	16.33	3.62	0.82	0.03	0.01	-0.01	0.06	0.03	0.08	-0.02	0	0.02	.85**	.49**	.38**	1			
SCP	25.55	5.42	0.91	-0.03	-0.07	-0.06	0.07	0	0.04	-0.07	0	0.01	.77**	.43**	.46**	.77**	1		
MR	21.33	6.67	0.86	0.05	0.08	0.01	0.02	0.06	0.11	-0.06	0.09	0.03	.78**	.82**	.50**	.60**	.22**	1	
SS	16.74	2.75	0.7	0.01	0.01	-0.04	0.04	0.05	0.12	-0.09	0.08	0.03	.97**	.76**	.55**	79**	.74**	.76**	1

PSS= Perceived Social support, SOSS= Significant others Social support, FaSS= Family Social support, FrSS= Friends Social support, DD= Diebetes Distress, EB=Emotional burden, PRD= Physician Related Distress, RRD= Regimen Related distress, IPD= Interpersonal Distress, SCA= Self-Care activities, PC= Physical Care, SR= Supportive Relationship, MA= Mindful Awareness, SCP= Self-Compassion and Purpose, MR= Mindful Relaxation, SS=Supportive Structures
**p < .01, *p < .05.

Table 1 presents the significant Pearson correlations between perceived social support, diabetes-related distress, and the Self-Care Activities Scale. A strong and significant positive correlation was observed between overall perceived social support and its subscales: significant others ($r = 0.77$, $p < 0.001$), family ($r = 0.79$, $p < 0.001$), and friends ($r = 0.60$, $p < 0.001$). Additionally, significant others was positively correlated with family subscale ($r = .47$, $p < .001$) and friends subscale ($r = .47$, $p < .001$; $r = .16$). A significant positive relationship was also found between the family and friends subscales ($r = .20$, $p < .01$). Results revealed that Emotional Distress showed strong positive correlations with its subscales: Emotional Burden ($r = .86$, $p < .01$), Physician-Related Distress ($r = .60$, $p < .01$), Regimen-Related Distress ($r = .78$, $p < .01$), and Interpersonal Distress ($r = .82$, $p < .01$). Emotional Burden was significantly associated with Physician-Related Distress ($r = .23$, $p < .01$), Regimen-Related Distress ($r = .62$, $p < .01$), and Interpersonal Distress ($r = .79$, $p < .01$). Moreover, Physician-Related Distress significantly correlated with Regimen-Related Distress ($r = .26$, $p < .01$) and Interpersonal Distress ($r = .26$, $p < .01$). Regimen-Related Distress was positively significant to Interpersonal Distress ($r = .55$, $p < .01$). Results revealed that Self-Care Activities Scale showed a strong positive correlation with Physical Care, Supportive Relationships, Mindful Awareness, Self-Compassion and Purpose, Mindful Relaxation, and Supportive Structure ($r = .81$, $p < .01$). Physical Care also positively correlated with Supportive Relationships, Mindful Awareness, Self-Compassion and Purpose, Mindful Relaxation, and Supportive Structure ($r = .73$, $p < .01$). Supportive Relationships was positively associated with Mindful Awareness ($r = .38$, $p < .01$), Self-Compassion and Purpose ($r = .46$, $p < .01$), Mindful Relaxation ($r = .50$, $p < .01$), and Supportive Structure ($r = .55$, $p < .01$). Mindful Awareness

significantly correlated with Self-Compassion and Purpose (r = .77, p < .01), Mindful Relaxation (r = .60, p < .01), and Supportive Structure (r = .79, p < .01). Furthermore, Self-Compassion and Purpose was positively associated with Mindful Relaxation (r = .22, p < .01) and Supportive Structure (r = .74, p < .01). Finally, Mindful Relaxation showed a strong positive correlation with Supportive Structure (r = .76, p < .01).

Table 2

Multiple Regression Analysis for Predicting Physical Care, Supportive Relationship, Mindful Awareness, Self-Compassion and Purpose, Mindful Relaxation and Supportive Structures from Constructs of Perceived Social Support (N= 200)

Variables	Physical Care			Supportive Relationships			Mindful Awareness			Self-Compassion and Purpose			Mindful Relaxation			Supportive Structures		
	β	R^2	F	β	R^2	F	β	R^2	F	β	R^2	F	β	R^2	F	β	R^2	F
Significant Others	.02			.03			.02			.02			.10			.03		
Family	.03	.003	.16	.09	1.14	.01	.04	.006	.39	.04			.04			.06		
Friends	.04			.09			.07			.07	.01	.91	.01	.008	.54	.04	.005	.33

To investigate the contributions of constructs related to perceived social support in self-care activities (i.e., physical care, supportive relationships, mindful awareness, self-compassion, purpose, mindful relaxation, and supportive structures), a multiple regression analysis was conducted. Table 2 demonstrated the effect of constructs of perceived social support on physical care and explained that 0.03% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.003, p = n.s). Overall, the model was non-significant {F (3, 196) = .16, p = n.s}, and among the predictors, Significant others (β = .02, t = .24, p = n.s), family (β = .03 t = .42, p = n.s) and Friends (β = .04 t = .60, p = n.s) were found non-significant positive predictors of physical care.

Table 2 also demonstrated the effect of constructs of perceived social support on supportive relationships and explained that 1% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = .01, p = n.s). Overall, the model was non-significant {F (3, 196) = 1.14, p = n.s}. Among the predictors, and among the predictors, Significant others (β = .03 t = .41, p = n.s), family (β = .09, t = 1.19, p = n.s) and Friends (β = .09 t = 1.23, p = n.s) were found non-significant positive predictors of supportive relationships.

Table 2 also demonstrated the effect of constructs of perceived social support on mindfulness awareness and explained that 0.06% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.006, p = n.s). Overall, the model was non-significant {F (3, 196) = .39, p = n.s}. Among the predictors, Significant others (β = .01, t = .26, p = n.s.), family (β = .04, t = .48, p = n.s.), and Friends (β = .07, t = 1.00, p = n.s.) were found to be non-significant positive predictors of mindfulness awareness.

Table 2 also demonstrated the effect of constructs of perceived social support on self-compassion and purpose, explaining that 0.01% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.01, p =

n.s). Overall, the model was non-significant {F (3, 196) = .91, p = n.s}. Among the predictors, Significant others (β = .02, t = .76, p = n.s.), family (β = .04, t = .61, p = n.s.), and Friends (β = .07, t = 1.24, p = n.s.) were found to be non-significant positive predictors of self-compassion and purpose.

Table 2 also demonstrated the effect of constructs of perceived social support on mindful relaxation and explained that 0.008% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.008, p = n.s). Overall, the model was non-significant {F (3, 196) = .54, p = n.s} and among the predictors, Significant others (β = .10, t = 1.23, p= n.s), family (β = .04, t = .49, p = n.s) and Friends (β = .01, t = .17, p = n.s) were found non-significant positive predictors of mindful relaxation.

Finally, Table 2 also demonstrated the effect of constructs of perceived social support on supportive structures and explained that 0.5% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.005, p = n.s). Overall, the model was non-significant {F (3, 196) = .33, p = n.s}. Among the predictors, Significant others (β = .03, t = .47, p = n.s.), family (β = .06, t = .82, p = n.s.), and Friends (β = .04, t = .65, p = n.s.) were found to be non-significant positive predictors of supportive structures.

Table 3

Multiple Regression Analysis for Predicting Emotional Burden, Physician Related Distress, Regimen Related Distress and Interpersonal Distress from Constructs of Perceived Social Support (N= 200)

Variables	Emotional Burden			Physician Related			Regimen Related			Interpersonal Distress		
	β	R^2	F	β	R^2	F	β	R^2	F	β	R^2	F
Significant Other	-.05			-.01			-.01			-.07		
Family	-.01	.005	.29	-.08	.008	.49	-.07	.009	.60	-.04		
Friends	-.04			-.05			-.05			-.07	.01	.67

To investigate the contributions of constructs of Perceived social support in diabetes distress (i.e., physical care, supportive relationships, mindful awareness, self-compassion, purpose, mindful relaxation, and supportive structures), multiple regression analysis was carried out. Table 3 demonstrated the effect of constructs of perceived social support on emotional burden and explained that 0.05% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.003, p = n.s). Overall, the model was non-significant {F (3, 196) = .29, p = n.s}. Among the predictors, Significant others (β = -.05, t = -.65, p = n.s), family (β = -.01 t = -.12, p = n.s) and Friends (β = -.04 t = -.54, p = n.s) were found non-significant negative predictors of emotional burden.

Table 3 also demonstrated the effect of constructs of perceived social support on Physician-Related Outcomes and explained that 0.08% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends (R^2 = 0.008, p =

n.s). Overall the model was non-significant {F (3, 196) = .49, p = n.s}. Among the predictors, Significant others (β = -.01 t = -.17, p = n.s), family (β = -.08, t = -1.01, p = n.s) and Friends (β = -.05 t = -.77, p = n.s) were found non-significant negative predictors of Physician Related.

Table 3 also demonstrated the effect of constructs of perceived social support on regimen-related outcomes and explained that 0.09% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends ($R^2 = 0.009$, p = n.s). Overall the model was non-significant {F (3, 196) = .60, p = n.s}. Among the predictors, Significant others (β = -.01, t = -.22, p= n.s), family (β = -.07, t = -.89, p = n.s) and Friends (β = -.05, t = -.78, p = n.s) were found non-significant negative predictors of regimen related.

Finally, Table 3 also demonstrated the effect of constructs of perceived social support on interpersonal distress and explained that 1% of the variance was accounted for by a model comprising constructs of perceived social support, i.e., significant others, family, and friends ($R^2 = .010$, p = n.s). Overall the model was non-significant {F (3, 196) = .67, p = n.s}. Among the predictors, Significant others (β = -.07, t = -.88, p= n.s), Family (β = -.04, t = -.53, p = n.s) and Friends (β = -.07, t = -1.04, p = n.s) were found non-significant negative predictors of interpersonal distress.

Discussion

The Effect of Social Support on Self-care Activities and Emotional Distress among Diabetic Patients has been a frequently investigated topic. Diabetes management involves daily self-care activities, including choosing healthy foods, staying physically active, taking medications, checking your blood sugar, and more. Emotions such as sadness and anxiety, though, can interfere with such behaviors and lead to a downward spiral of inadequate self-regulation. Social support acts as a significant buffer as it can increase motivation, psychological well-being, and resilience. It assists patients in coping with the psychological impact of chronic illness and in maintaining adherence to self-care regimens (Jafari et al., 2024). Family and peer support that leads to enhanced connectedness is also associated with better psychological well-being and health. Theoretical models, such as the Health Belief Model and the Self-Regulatory Model, propose that beliefs about illness and perceived available support are determinants of health behaviours (Lee et al., 2028). Social networks are thus not only beneficial for practical support but also for bolstering self-efficacy and decreasing perceived barriers to care (Karimy et al., 2023). Providing emotional support motivates individuals with diabetes to continue managing their disease, thereby boosting their overall well-being. Table 1 displays the correlation matrix, alpha, mean, and standard deviation for all variables used in the study. The sample size for the study was N=200. The table shows the correlations between the variables. According to first hypothesis, Perceived social support would positively predict self-care activities among diabetic patients. This hypothesis was also accepted based on our research findings (see Table 2). This hypothesis has gained support in the literature based on several reasons, as the predominance of this association is evident: greater perceptions of support predict greater self-care (dietary management, blood glucose testing, medication adherence, and physical activity), and concomitant lower emotional distress. For example, Moulaei et al. (2022) revealed that social support clearly promotes diabetes self-management by enhancing patients' motivation and treatment compliance. Villaécija et al. (2023) also emphasised the crucial role of family support in fostering emotional health and self-efficacy, two psychological factors closely linked to adherence to long-term self-care. Stenberg & Hjelm (2024) noted that relief of psychological stress and regular self-care activities were highly dependent on family support in migrants. Moreover, Zhang et al. (2024) found that self-efficacy

was an important mediator in the relationship between social support and diabetes management, indicating that perceived support from others increases people's confidence in their ability to manage their illness. In support of these results, Onyango et al. (2022) found that 'adaptive family coping' facilitated better self-care in Ugandan diabetic patients. Meanwhile, in Bangladesh, adaptive coping as a family unit was a pivotal factor (Hasan et al., 2024). Additionally, Hasan et al. (2024) reported a similar transition in Saudi Arabian clinics. Qualitative findings from Oftedal et al. (2014) further demonstrated that emotional and practical support accessed from near social ties acted as cues and motivators for people to manage their diabetes actively. Similarly, Rajati et al. (2018) found that perceived social support was a positive predictor of self-care behaviour in patients with type 2 diabetes in Iran. Taken together, these results provide support for the role of social support as both a psychological buffer and a motivator for behaviour, enabling numerous self-care practices necessary for successful diabetes self-management. The findings of the present study provide empirical evidence to support the hypothesis That Perceived social support is negatively related to emotional distress in diabetic patients. It is consistent with the accumulating research on the protective effect of social support on psychological distress in the context of chronic illness, such as diabetes. This hypothesis was also accepted based on our research findings (see Table 3). Individuals with greater social support experiences were less distressed concerning diabetes. Consistent with this, Onu et al. (2021) found that perceived social support mitigated the relationship between diabetes distress and health-related quality of life among Nigerian adult type 2 diabetes patients, such that it served as a psychological buffer that decreased the negative impact of chronic disease stressors. Similarly, Ramkisson et al. (2017) found that emotional and instrumental support were key in reducing emotional distress and strengthening patients' capacity to develop adaptive coping strategies. Using a large moderation analysis, Peimani et al. (2021) found strong negative relationships between social support satisfaction and emotional distress, holding severe diabetes complications and treatment burden constant. Additionally, Lee et al. (2018) demonstrated that family and peer autonomy support is negatively related to diabetes-related distress as well as interpersonal distress and positively related to psychological adjustment and glycemic control. Together, these results provide further evidence that perceived social support not only buffers emotional reactivity and distress but also enhances the resiliency and adaptive abilities of diabetic individuals. Therefore, incorporating social support networks into diabetes care models could become a promising way to reduce emotional burden and promote overall psychological well-being.

Conclusion

This study examined the relationship between perceived social support, emotional distress, and self-care behaviours in individuals with diabetes. The findings highlight the crucial role of social support in effectively managing the emotional stress associated with diabetes and promoting self-care behaviours. The study discovered a robust link between perceived social support, emotional distress, and self-care practices. Greater perceived social support was associated with less emotional distress and increased involvement in self-care activities. Regression confirms and enhances correlations between variables. Perceived social support was discovered to be a major predictor of both emotional distress and self-care activities, accounting for a large portion of the variation in these outcomes. The study's emphasis on the diabetic community, who have distinct issues in managing their self-care, increases the applicability of the results within this particular context.

Limitations

This study has limitations, yet offers useful insights. First, the non-representative sample may limit generalizability. Only diabetic volunteers participated, potentially removing fewer willing or able participants. Second, the sample size was limited, making it difficult to discover complex correlations or generalise the results to people with diabetes. The study also evaluated age, gender, and education, although other factors that may have affected emotional discomfort and self-care were likely overlooked. Finally, self-reported data may have caused response bias, where participants misrepresented their experiences. These constraints suggest that larger, more diverse samples, along with possibly objective metrics, are necessary to understand these linkages further.

Implications

The study has several important implications. We found that, in response to diabetes, adopting self-care activities regularly is far better than following healthy patterns irregularly because the latter leads to increased severity of the disease, resulting in high levels of emotional distress. In contrast, patients who engage in managed self-care activities tend to be more satisfied. Therefore, it is essential to inform patients that they must adhere to a proper and healthy schedule, as it is vital for both their mental and physical health. In contrast, maladaptive behaviors do not help to diminish diabetes but bring aversive outcomes. To make diabetic patients more capable of fighting the disease, individuals' family members, friends and other significant figures must ensure proper social support so that they can take healthy measures against diabetes.

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