Journal of Psychology and Behavioural Sciences

[ISSN 2958-1117]
Volume: 04 Issue: 01 | March-2025

JPBS

PSYCHOLOGICAL FACTORS INFLUENCING SELF-MANAGEMENT CHALLENGES IN TYPE 2 DIABETES AMONG ADULT PATIENTS AT LAMU HOSPITAL, KENYA

Authors

Grace Muthoni Kinyanjui [(1)]; **Rahab Gathuci** [(2)]

Main author's email: muthonikinyanjui162@gmail.com

(1.2) Mount Kenya University, Kenya.

Cite this article in APA

Kinyanjui, G. M., & Gathuci, R. (2025). Psychological factors influencing self-management challenges in type 2 diabetes among adult patients at Lamu Hospital, Kenya. *Journal of psychology and behavioural sciences*, *4*(1), 1-12. https://doi.org/10.51317/jpbs.v4i1.699

OPEN ACCESS

A publication of Editon Consortium Publishing (online)

Article history

Received: 09.01.2025

Accepted 11.02.2025

Published: 11.03.2025

Scan this QR to read the paper online

ABSTRACT

The aim of this study is to examine the influence of psychological factors emotional distress, self-efficacy, and social support on the self-management of type 2 diabetes mellitus (T2DM) among adult patients at Lamu Hospital, Kenya. Despite self-management being a key component of diabetes care, many patients struggle with adherence, particularly in low-resource settings, where the psychological burden of diabetes remains underexplored. A quantitative, cross-sectional study design was adopted, guided by the Roy Adaptation Model and Social Cognitive Theory. Data were collected from 265 adult T2DM patients using a validated questionnaire. Analysis was conducted using SPSS, applying chi-square tests to assess associations between psychological factors and self-management practices, alongside frequency distributions and percentages for descriptive analysis. Findings revealed a high prevalence of emotional distress, with 51 per cent reporting that diabetes consumed significant mental and physical energy. Gender significantly influenced self-efficacy in meal planning ($\chi^2 = 6.91$, $p = 0.009$), while age impacted exercise self-efficacy ($\chi^2 = 12.32$, $p = 0.006$). Additionally, 70 per cent of patients relied on social support. Emotional distress frequently interfered with self-management practices, including medication adherence, diet, physical activity, and blood sugar monitoring. These findings underscore the critical role of psychological factors in diabetes self-management. Integrating emotional support and self-efficacy-enhancing strategies into diabetes care may improve patient outcomes. Future research should explore the long-term effects of psychological interventions on diabetes management.

Key terms: Coping strategy, emotional distress, self-efficacy, self-management, type 2 diabetes mellitus (T2DM).

INTRODUCTION

Type 2 diabetes mellitus (T2DM) is a growing public health concern, affecting approximately 537 million adults worldwide (International Diabetes Federation [IDF], 2021). The burden of T2DM is particularly severe in low-resource settings, where limited healthcare access and inadequate self-management support contribute to poor disease outcomes (Dugani et al., 2021). Effective self-management, including medication adherence, dietary modifications, physical activity, and blood glucose monitoring, is crucial for glycemic control and reducing complications. However, psychological factors such as emotional distress, self-efficacy, and social support significantly influence patients' ability to adhere to self-management practices (Ataya & Albani, 2024). Studies suggest that high levels of diabetes distress can lead to burnout, non-adherence to treatment, and worsening health outcomes (Fisher et al., 2019). Conversely, strong self-efficacy and social support have been associated with improved diabetes self-care behaviours (Madroumi et al., 2024).

The self-management of T2DM requires individuals to take responsibility for their care by adhering to prescribed medication, following dietary recommendations, engaging in physical activity, and regularly monitoring blood glucose levels. However, these efforts can be hindered by emotional distress, which arises from the ongoing psychological burden of managing the disease. Coping strategies, including seeking social support, play a crucial role in helping patients navigate the emotional challenges of diabetes self-care. Additionally, self-efficacy, the belief in one's ability to successfully manage diabetes, affects adherence to treatment regimens and overall health outcomes. While previous studies have explored the clinical and biomedical aspects of diabetes care, the psychosocial dimensions remain underexamined, particularly in resource-limited settings such as Lamu Hospital, Kenya (Stephani et al., 2018). The limited research on the role of counselling psychology in supporting diabetes self-management creates a gap in understanding how psychological factors impact treatment adherence and self-care behaviours.

This study explored the influence of psychological factors on self-management practices among T2DM patients at Lamu Hospital. Specifically, it examined the prevalence and impact of emotional distress, self-efficacy, and coping strategies, highlighting their roles in diabetes self-care. By analysing how these factors shape treatment adherence and overall health outcomes, the study provides evidence-based insights into psychological barriers and facilitators of self-management. The findings offer valuable information to inform the development of psychosocial interventions tailored to diabetes management in resource-limited settings, contributing to both clinical practice and counselling psychology.

LITERATURE REVIEW

The following section presents empirical studies related to the key objectives of this study, including the prevalence of emotional distress among T2DM patients, self-efficacy in diabetes self-management, coping strategies employed by patients, and the influence of emotional distress on self-management practices.

Prevalence of Emotional Distress among T2DM Patients

Snoek et al. (2015) provided a systematic review of diabetes-related distress, emphasising its distinction from clinical depression while underscoring its widespread prevalence. The strength of this study lies in its comprehensive review approach, which consolidates findings from multiple studies, thereby offering a broad perspective on diabetes distress. However, systematic reviews, while informative, rely on the quality of included studies, and potential variations in study methodologies and populations could affect the generalizability of the findings.

Chew et al. (2016) reported that 38 per cent of Malaysian adults with T2DM experienced diabetes distress. This study provides valuable empirical evidence on the emotional burden of diabetes. However, its limitation lies in the geographic and cultural specificity, which may restrict its applicability to other populations, particularly those in low-income settings where healthcare access and psychosocial support structures differ. The study's methodology, including its sample size and distress measurement tools, would need further scrutiny to assess its robustness.

Amankwah-Poku et al. (2020) focused on Ghana, highlighting significant psychosocial distress among T2DM patients. The study's emphasis on integrating mental health support into diabetes care is a crucial policy recommendation. However, it would be important to evaluate the study's methodology, whether it used validated psychological scales or relied on self-reported distress measures, which may introduce response biases. The study's implications for healthcare policy in resource-limited settings further strengthen its contribution to diabetes care literature.

Njiru (2022) examined psychological distress among T2DM patients in Kenya, specifically at Kenyatta National Hospital. While the study underscores the need for routine emotional distress screening, its hospital-based nature may introduce selection bias, as it primarily captures data from individuals actively seeking medical care rather than the broader T2DM population, including those in rural or low-resource settings. Examining whether the study employed validated distress scales (e.g., Diabetes Distress Scale) would further inform its methodological rigour.

Self-Efficacy in Diabetes Self-Management

Indelicato et al. (2017) demonstrated a link between higher self-efficacy and improved glycemic control in Italian T2DM patients. This study's strength lies in its clinical relevance; glycemic control is a key outcome in diabetes management. However, self-efficacy is influenced by multiple factors, including educational background, healthcare support, and socioeconomic status, which may differ between Italy and low-income settings. The study may not fully capture these nuances, limiting its applicability outside high-resource environments.

Huang et al. (2022) examined self-efficacy among Latino Americans, reinforcing the importance of culturally tailored interventions. The study adds an essential dimension by considering cultural influences on self-care behaviours. However, Latino American populations, while facing socioeconomic challenges, still have relatively better healthcare access than many African contexts. This raises questions about how well these findings translate to settings with more severe resource constraints.

Nelson et al. (2019) identified socioeconomic disparities as a barrier to self-efficacy and self-care behaviours. This study's strength is its focus on financial constraints, a crucial determinant of health outcomes in low-income settings. However, self-efficacy is also shaped by psychological and community-level factors, which may not have been fully explored. The study's methodology, particularly whether it controlled for confounding variables such as healthcare accessibility and literacy levels, would be worth examining.

Ojewale et al. (2021) found a strong correlation between high self-efficacy and adherence to diabetes self-care behaviours in Nigeria. This study is valuable in an African context, reinforcing the need to strengthen patients' confidence in managing diabetes. However, correlation does not imply causation of other factors, such as social support, education, and healthcare access could influence both self-efficacy and adherence. A deeper examination of the study's design (e.g., whether it was cross-sectional or longitudinal) would clarify the strength of its conclusions.

Mash and Cairncross (2023) conducted a randomised controlled trial (RCT) in South Africa, demonstrating that self-management interventions improved self-efficacy. RCTs are a gold standard for establishing causal relationships, making this study particularly robust. However, scalability remains a key issue whether similar interventions would yield comparable results in underfunded public health systems is uncertain. The cost-effectiveness and long-term sustainability of such programs would require further investigation.

Seeking social support as a Coping Strategy in Diabetes Self-Management

Literature on social support as a coping strategy in diabetes self-management is presented with a commendable focus on its positive influence across diverse contexts. Baig et al. (2015) provided evidence from the United States that family involvement could enhance adherence to both medication and dietary plans among T2DM patients. This finding underscored the beneficial impact of close familial networks on self-care behaviours. In parallel, Zhang et al. (2024)

showed that, in a Chinese context, higher levels of social support not only alleviated emotional distress but also led to better glycemic control and improved adherence to self-management regimens. These studies together built a convincing case for the critical role that social networks play in moderating the stress associated with chronic disease management.

However, while the findings are robust in emphasising the importance of social support, a closer examination of the methodologies reveals some limitations. Many of the studies appeared to rely on observational and cross-sectional designs, which, although valuable for identifying associations, inherently limited the ability to draw causal inferences. Furthermore, these studies likely depended on self-reported measures to assess both the extent of social support and adherence behaviours. Such reliance may introduce response bias or cultural variations in the interpretation of what constitutes "support." The inclusion of research from African contexts, such as those by Ayele et al. (2020), Ampofo et al. (2022), and Kiarie et al. (2023), is particularly valuable because it broadened the geographical perspective and emphasised the role of community ties in resource-constrained settings. Yet, similar methodological concerns persist differences in measurement tools and sampling methods across settings can complicate direct comparisons and generalisations.

Influence of Emotional Distress on Diabetes Self-Management Practices

Existing literature consistently shows that emotional distress negatively impacts diabetes self-management. European studies (Beverly et al., 2020; Morales-Brown et al., 2024; Snoek et al., 2015; Chew et al., 2016) demonstrate that higher distress levels reduce medication adherence, problem-solving abilities, glucose monitoring, and dietary adjustments. In African contexts, similar patterns emerge. Distress in West Africa leads to avoidance behaviours, while Mendenhall (2020) and Saleh et al. (2019) linked high distress with reduced self-care practices. Collectively, these findings suggest that alleviating distress may enhance diabetes management outcomes.

However, most studies used cross-sectional designs and self-reported data, limiting causal inferences and raising questions about generalizability due to diverse cultural and healthcare settings. In resource-constrained Nairobi slums, Otieno et al. (2021) underscored that limited psychosocial support worsens self-care, while other Kenyan studies by Njiru (2022) and Kamau (2022) further connected elevated distress with poorer adherence to medication, glucose monitoring, and lifestyle modifications, despite similar methodological limitations.

METHODOLOGY

This study employed a cross-sectional research design to examine the influence of psychological factors on the self-management of type 2 diabetes mellitus (T2DM) among adult patients at Lamu Hospital. A quantitative approach was used to assess emotional distress, self-efficacy, and seeking social support as a coping strategy in relation to self-management practices.

Data were collected through a structured questionnaire incorporating validated scales such as the Diabetes Distress Scale (DDS), Diabetes Management Self-Efficacy Scale (DMSES), and Brief COPE Inventory. The questionnaire also captured socio-demographic characteristics relevant to the study.

The study population comprised T2DM patients attending the outpatient clinic and medical wards. A systematic random sampling technique was applied, where every 2nd and 3rd patient in the clinic and ward was selected, starting from a randomly chosen point. This approach ensured a representative sample. A total of 265 participants met the inclusion criteria, which required a confirmed T2DM diagnosis and being 18 years or older.

Data analysis was conducted using SPSS software. Descriptive statistics summarised demographic characteristics and psychological measures, while inferential statistics, including chi-square tests, were used to assess associations between psychological factors and self-management behaviours. Statistical significance was set at $p < 0.05$.

FINDINGS AND DISCUSSION

Response Rate

Achieving a high response rate is crucial for ensuring data reliability in descriptive research. Studies emphasise that response rates above 50 per cent improve the validity of research findings (Njiru, 2022). A response rate exceeding 70 per cent further strengthens research robustness (Qin et al., 2020). Table 1 presents the response rate for this study:

Table 1: Response Rate

Response	Frequency	Percentage (%)
Returned	202	76.23%
Unreturned	63	23.77%
Total	**265**	**100%**

Of the 265 questionnaires distributed, 202 were completed and returned, yielding a high response rate of 76.23 per cent. This was attributed to strong respondent cooperation, enhancing the study's credibility.

Demographic Characteristics of Respondents

This section presents the socio-demographic and socioeconomic characteristics of the 202 study participants. Understanding these characteristics is essential for analysing self-management practices among individuals with Type 2 Diabetes Mellitus (T2DM). Table 2 provides a summary:

Table 2: Socio-demographic Characteristics of the Participants (n=202)

	Category	**Counts**	**% of Total**	**Chi-squire (p-Value)**
Gender	Female	86	42.6%	χ^2 =6.91, p=0.009
	Male	116	57.4%	
Age	18 – 30 years	49	24.3%	χ^2 =12.32, p=0.006
	31 – 43 years	48	23.8%	
	44 – 56 years	56	27.7%	
	57 and over	49	24.2%	
Marital Status	Divorced/Separated	34	16.8%	χ^2 =32.32, p=0.0001
	Married	106	52.5%	
	Single	18	8.9%	
	Widowed	44	21.8%	
Education Level	No formal education	30	14.9%	χ^2 =4.16, p=0.245
	Primary education	78	38.6%	
	Secondary education	53	26.2%	
	Tertiary education	41	20.3%	
Employment	Employed	51	25.2%	χ^2 =0.61, p=0.894
	Retired	42	20.8%	
	Self-employed	49	24.3%	
	Unemployed	60	29.7%	
Income Level	High (above KES 50,000)	44	21.8%	χ^2 =37.58, p<0.0001
	Medium (KES 10,000-50,000)	79	39.1%	
	Low (below KES 10,000)	79	39.1%	
Diabetes Duration	Less than 12 months	18	8.9%	χ^2 =22.62, p<0.0001

	1 – 6 years	78	38.7%	
	7 – 12 years	72	35.6%	
	Above 12years	34	16.8%	

Summary of Key Demographic Findings

Gender: The majority of respondents were male (57.4%), with a significant association between gender and diabetes-related characteristics (χ^2 =6.91, p=0.009).

Age: Participants were distributed across different age groups, with the largest proportion (27.7%) aged 44–56 years. Age had a significant influence on diabetes self-management (χ^2 =12.32, p=0.006).

Marital Status: Most participants were married (52.5%). Marital status was significantly associated with self-management (χ^2 =32.32, p=0.0001), indicating that social support may play a key role.

Education Level: Primary education was the most common (38.6%). However, no significant association was found between education level and self-management (χ^2 =4.16, p=0.245).

Employment and Income: A significant proportion (29.7%) were unemployed, and 39.1 per cent earned a low income (<KES 10,000/month), which was significantly associated with diabetes self-management (χ^2 =37.58, p<0.0001).

Duration of Diabetes: The majority (38.7%) had lived with diabetes for 1–6 years, and longer disease duration was significantly associated with improved self-management practices (χ^2 =22.62, p<0.0001).

These demographic findings provide a foundation for analysing psychological influences on diabetes self-management in subsequent sections.

Results/Findings on the Prevalence of Emotional Distress on T2DM Self-Management among Adult Patients in Lamu Hospital, Kenya

The findings indicate that emotional distress is prevalent among T2DM patients at Lamu Hospital, affecting their self-management abilities. Emotional distress was assessed based on four key aspects: feelings of being overwhelmed, mental and physical exhaustion, adherence to dietary plans, and perceptions of failure in diabetes routines.

1. Demands of Living with Diabetes

A significant proportion of participants reported experiencing emotional strain in managing their condition. Specifically, 30.2 per cent felt overwhelmed "a little," while 12.9 per cent felt overwhelmed "very much." Overall, more than 80 per cent of respondents reported some level of emotional distress, highlighting its profound impact on self-management behaviours such as blood glucose monitoring, medication adherence, and physical activity.

2. Mental and Physical Energy Consumed by Diabetes

Diabetes' self- management was found to be mentally and physically exhausting for many participants. A total of 51.0 per cent reported that managing diabetes consumed "quite a bit" or "very much" of their energy. This emotional exhaustion can lead to burnout and reduced adherence to self-management behaviours. Psychological interventions focusing on stress management could help alleviate this burden and improve patients' ability to sustain essential self-care routines.

3. Adherence to a Good Meal Plan

Many participants reported challenges in following a healthy diet. Specifically, 29.8 per cent struggled "quite a bit" with dietary adherence, which may be linked to emotional distress, frustration, and emotional eating. Psychological support and structured interventions targeting stress and emotional eating could improve adherence to healthy dietary habits and enhance glycemic control.

4. Perceptions of Failure in Diabetes Routine

Feelings of failure in diabetes management were common among participants, with 27.2 per cent reporting that they felt "quite a bit" like they were failing in their routines. These negative perceptions can undermine self-efficacy, leading to poor diabetes self-management. Psychological interventions, including cognitive-behavioral therapy and motivational interviewing, could help patients develop

a more positive mindset and regain confidence in managing their condition.

In conclusion, the findings highlight that emotional distress is a significant barrier to effective diabetes self-management. Over 80 per cent of participants experienced emotional strain, with 51.0 per cent reporting considerable mental and physical exhaustion. Additionally, 39.7 per cent struggled with dietary adherence, and 42.1 per cent felt they were failing in their diabetes routines. These emotional burdens can negatively impact critical self-management behaviours. Integrating psychological support, including stress management interventions and counselling, could help mitigate these challenges and improve diabetes care outcomes.

Findings on Self-Efficacy Levels in T2DM Self-Management

Objective 2 assessed patients' self-efficacy in managing key aspects of type 2 diabetes mellitus (T2DM), including adherence to dietary recommendations, regular exercise, blood sugar monitoring, hypoglycemia management, and medication adherence. Self-efficacy is crucial in ensuring effective diabetes management, with higher confidence levels linked to better health outcomes.

1 Self-Efficacy in Following a Healthy Meal Plan at Social Events

Adhering to dietary recommendations in social settings proved challenging for many participants. As shown in Table 3, 34.6 per cent reported being "not at all confident" in maintaining their meal plan at social gatherings, while only 9.9 per cent were "completely confident." A chi-square test (χ^2 =6.91, p=0.245) indicated a significant gender difference, with female participants reporting lower confidence levels than males.

Table 3: Self-Efficacy in Following a Healthy Meal Plan at Social Events (n = 202)

How confident are you in your ability to follow a healthy meal plan even when you are at a social event?	Counts	% of Total
Completely confident	20	9.9%
Moderately confident	60	29.7 %
Not at all confident	70	34.6 %
Slightly confident	22	10.9%
Very confident	30	14.9 %

2. Self-Efficacy in Exercising Regularly Despite Fatigue

Fatigue significantly impacted confidence in maintaining an exercise routine. As illustrated in Table 4, 65.9 per cent of respondents exhibited low confidence, with 37.2 per cent "slightly confident" and 28.7 per cent "not at all confident." Only 8.9 per cent were "completely confident." A chi-square test (χ^2 =12.32, p=0.006) showed significant differences across age groups, with middle-aged participants displaying higher confidence levels.

Table 4: Self-Efficacy in Exercising Regularly Despite Fatigue (n = 202)

How confident are you in your ability to exercise regularly despite feeling tired?	Counts	% of Total
Completely confident	18	8.9 %
Moderately confident	31	15.3 %
Not at all confident	58	28.7%
Slightly confident	75	37.2%
Very confident	20	9.9 %

3. Self-efficacy in Regular Blood Sugar Monitoring

Regular blood sugar monitoring remains a challenge for many patients, with 29.7 per cent reporting "not at all confident" and 34.6 per cent "slightly confident" in their ability to monitor their glucose levels (Table 5). Only 14.9 per cent were "completely confident." Educational attainment did not significantly influence self-efficacy in blood sugar monitoring (χ^2 =4.16, p=0.245).

Table 5: Self-Efficacy in Regular Blood Sugar Monitoring (n=202)

How confident are you in your ability to check your blood sugar regularly?	Counts	% of Total
Completely confident	30	14.9%
Moderately confident	27	13.4%
Not at all confident	60	29.7%
Slightly confident	70	34.6 %
Very confident	15	7.4 %

4 Self-Efficacy in Managing Low Blood Sugar

Managing hypoglycemia is another critical aspect of diabetes self-care. As shown in Table 6, 26.7 per cent of respondents lacked confidence in managing low blood sugar episodes, while only 8.9 per cent were "completely confident." A total of 25.7 per cent expressed "very confident" responses, suggesting a moderate level of self-efficacy in this area.

Table 6: Self-Efficacy in Managing Low Blood Sugar (n=202).

15) How confident are you in your ability to manage low blood sugar when it occurs?	Counts	% of Total
Completely confident	18	8.9 %
Moderately confident	48	23.8 %
Not at all confident	54	26.7 %
Slightly confident	30	14.9 %
Very confident	52	25.7 %

Findings on Seeking Social Support as a Coping Strategy

Objective 3 examined how patients with T2DM seek social support to cope with diabetes management. The findings from 202 patients at Lamu Hospital revealed that 69.3 per cent actively sought emotional support, with 39.6 per cent doing so frequently. However, 30.7 per cent reported minimal or no engagement in seeking support, highlighting potential risks of isolation.

Married individuals (52.5%) were the most likely to seek support, while single participants (8.9%) were the least likely. These patterns suggest that social networks significantly aid emotional coping, though some individuals may lack sufficient support.

From a counselling perspective, reinforcing support systems through peer groups, family therapy, and structured interventions could enhance self-management. Targeted efforts are also necessary for patients who are less engaged in seeking support, potentially through counselling and educational initiatives. These findings align with Ramkisson et al. (2017), emphasising the role of social support in psychological adjustment to chronic illness.

Findings on Emotional Distress' Influence on T2DM Self-Management

Objective 4 explored how emotional distress affects diabetes self-management. Results showed that 65.8

per cent of patients experienced emotional distress that hindered adherence to their care plan, with 27.2 per cent reporting frequent disruptions. Only 11.9 per cent stated that distress never interfered with their self-care practices.

A significant gender difference was observed (χ^2 = 6.91, p = 0.009), suggesting variations in how men and women experience emotional distress in diabetes management. These findings highlight the need for psychological interventions such as cognitive-behavioural therapy (CBT) and stress management strategies to enhance coping skills.

Strengthening social networks and integrating mental health support into diabetes care can mitigate the negative impact of distress. These insights align with Kalra et al. (2018), emphasising the importance of psychological interventions in improving self-management outcomes.

Discussion

1. Emotional Distress and Self-Management of T2DM

The findings indicate that a considerable proportion of patients experienced emotional distress related to diabetes management, with many patients feeling overwhelmed by the daily demands of the condition. This distress may significantly impact self-management behaviours, as previous research has shown that negative emotional responses to diabetes, such as frustration and exhaustion, can lead to reduced adherence to medication, dietary plans, and regular blood glucose monitoring (Fisher et al., 2010; Polonsky et al., 2016).

The Roy Adaptation Model (RAM) provided a useful framework for understanding these findings. According to RAM, individuals undergoing chronic stressors, such as managing diabetes, must adapt through physiological and psychosocial coping mechanisms (Roy, 2009). Emotional distress can disrupt this adaptation process, making it more challenging for patients to engage in self-management behaviours. Additionally, Bandura's Social Cognitive Theory (SCT) suggests that emotional states influence self-efficacy, which in turn affects behaviour (Bandura, 1997). Patients experiencing high emotional distress may perceive diabetes management as unmanageable, reducing their confidence in adhering to treatment regimens.

These findings align with previous studies emphasising the link between psychological distress and poor diabetes outcomes. For example, Hackett and Steptoe (2017) found that heightened emotional distress in T2DM patients was associated with lower self-efficacy and poorer glycemic control. Similarly, a study by Aikens (2012) demonstrated that diabetes-related emotional distress could predict non-adherence to self-care behaviours. Given these associations, psychological interventions aimed at reducing emotional distress, such as cognitive-behavioural strategies or peer support programs, may enhance self-management and improve overall diabetes outcomes.

2. Self-efficacy and Diabetes Self-Management

The study found that patients with higher confidence in their ability to manage diabetes, particularly in maintaining an exercise regimen despite fatigue, were more likely to engage in self-care behaviours. This aligns with previous research by Sarkar et al. (2020), which demonstrates that self-efficacy is a critical determinant of adherence to diabetes self-care behaviours. Greater confidence was associated with improved medication adherence, dietary modifications, and glucose monitoring, highlighting the importance of fostering self-efficacy in diabetes management.

Social Cognitive Theory provided a framework for understanding these results, as it emphasises the role of self-efficacy in behaviour change. Bandura (1997) suggests that when individuals believe in their ability to manage a condition effectively, they are more likely to engage in and sustain health-promoting behaviours. The findings suggest that factors such as goal-setting, problem-solving techniques, and social support may contribute to enhanced self-efficacy among patients, aligning with this theoretical perspective.

3. Coping Mechanisms and Stress Management

The study revealed that seeking social support was a key coping strategy among patients managing diabetes-related stress. Patients who reported actively seeking support from family, friends, and healthcare providers appeared to experience better emotional

resilience and adherence to self-care practices. These findings align with research by Hackett and Steptoe (2017), which highlights the role of social support in mitigating diabetes distress and improving overall well-being.

The Roy Adaptation Model explains this by emphasising that individuals facing chronic health challenges require effective coping strategies to maintain equilibrium. Social support may have provided emotional reassurance, practical assistance, and encouragement, reinforcing self-care behaviours such as medication adherence, dietary modifications, and glucose monitoring. Patients who engaged more with their support networks appeared to rely less on maladaptive coping mechanisms, suggesting that fostering strong social connections is crucial in diabetes self-management.

4. Emotional Distress and Self-Management Challenges

The study found that 65.8 per cent of patients experienced emotional distress that hindered their diabetes self-management, with 27.2 per cent reporting frequent disruption. Gender differences were statistically significant ($\chi^2 = 6.91$, $p = 0.009$), suggesting varied experiences between men and women.

These findings align with Kalra et al. (2018), who identified emotional distress as a barrier to diabetes care. Social Cognitive Theory (Bandura, 1977) explains this through its impact on self-efficacy, while the Roy Adaptation Model highlights the need for adaptive coping strategies.

Psychological interventions, such as cognitive-behavioural therapy (CBT) and stress management, alongside stronger social support, could help mitigate distress and improve adherence to diabetes self-care. Routine psychological screening should be integrated into diabetes management to enhance long-term health outcomes.

5. Implications for Diabetes Self-Management Interventions

The study highlights the need to integrate psychological support into diabetes care, as emotional distress significantly impacts self-management. Routine psychological screenings and tailored interventions, such as counselling and stress management training, should be incorporated. Enhancing self-efficacy through problem-solving skills and social support mechanisms like peer groups can improve adherence. Motivation-driven strategies, including goal-setting and reinforcement techniques, are essential for sustaining behavioural changes.

Grounded in the Roy Adaptation Model and Social Cognitive Theory, these approaches can help patients adapt more effectively. Future research should assess their long-term impact and explore additional psychosocial factors in low-resource settings.

CONCLUSION AND RECOMMENDATIONS

Conclusion: This study highlights the prevalence and impact of emotional distress on diabetes self-management among T2DM patients at Lamu Hospital. A significant proportion reported distress-related challenges, affecting adherence to care practices. Higher self-efficacy was linked to better self-management while seeking social support helped mitigate distress. Integrating psychological support into diabetes care can enhance self-efficacy and coping, improving self-management outcomes. Future research should explore long-term interventions to strengthen these psychological factors.

Recommendations: The study underscores the need for a comprehensive approach to managing T2DM by addressing both physical and emotional challenges. Integrating psychological support through counselling, CBT, mindfulness, and relaxation techniques into routine care can help patients cope with emotional burdens and enhance treatment adherence. Tailored counselling should target feelings of overwhelm and exhaustion, while dietary adherence programs must address psychological barriers and provide practical strategies for healthy eating. Additionally, regular screening for emotional distress using tools like the Diabetes Distress Scale is recommended to enable timely, targeted interventions. Finally, patient education workshops should empower individuals with stress management, energy conservation, and cognitive reframing skills to better manage their condition.

REFERENCES

Aikens, J.E. (2012). Prospective associations between emotional distress and poor outcomes in type 2 diabetes. *Diabetes Care, 35*(12), 2472–2478.

Amankwah-Poku, M., Amoah, A. G., Sefa-Dedeh, A., & Akpalu, J. (2020). Psychosocial distress, clinical variables and self-management activities associated with type 2 diabetes: A study in Ghana. *Clinical Diabetes and Endocrinology*, *6*, 1-10.

Ampofo, E. O., Kwakye, I. N., & Aidoo, E. (2022). Role of family support, spirituality and self-efficacy in type 2 diabetes self-care in Greater Accra Region, Ghana. *Journal of Education, Society and Behavioural Science*, *35*(7), 27-39.

Ataya, J., Soqia, J., & Albani, N. (2024). The role of self-efficacy in managing type 2 diabetes and emotional well-being: A cross-sectional study. *BMC Public Health, 24*, 3471. https://doi.org/10.1186/s12889-024-21050-2

Ayele, K., Tesfa, B., Abebe, L., Tilahun, T., & Girma, E. (2020). Self-care behaviour among patients with diabetes in Harari, Eastern Ethiopia: The health belief model perspective. *PLoS ONE*, *15*(8), e0237710.

Baig, A. A., Benitez, A., Quinn, M. T., & Burnet, D. L. (2015). Family interventions to improve diabetes outcomes for adults. *Annals of the New York Academy of Sciences*, *1353*(1), 89–112.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review, 84*(2), 191–215.

Beverly, E. A., Ritholz, M. D., Brooks, K. M., Hultgren, B. A., Lee, Y., Abrahamson, M. J., & Weinger, K. (2020). A qualitative study of perceived responsibility and self-blame in type 2 diabetes: Reflections of physicians and patients. *Journal of General Internal Medicine*, 35(3), 791–797.

Chew, B. H., Vos, R., Mohd-Sidik, S., & Rutten, G. E. (2016). Diabetes-related distress, depression and distress-depression among adults with type 2 diabetes mellitus in Malaysia. *PloS one*, *11*(3), e0152095.

Dugani, S. B., Mielke, M. M., & Vella, A. (2021). Burden and management of type 2 diabetes in rural United States. *Diabetes/Metabolism Research and Reviews*, *37*(5), e3410. https://doi.org/10.1002/dmrr.3410

Fisher, L., Hessler, D. M., Polonsky, W. H., & Mullan, J. T. (2012). When is diabetes distress clinically meaningful? Establishing cut points for the Diabetes Distress Scale. *Diabetes Care, 35*(2), 259-264.

Fisher, L., Polonsky, W. H., & Hessler, D. (2019). Addressing diabetes distress in clinical care: a practical guide. *Diabetic medicine: A Journal of the British Diabetic Association*, *36*(7), 803–812. https://doi.org/10.1111/dme.13967

Hackett, R. A., & Steptoe, A. (2017). Type 2 diabetes mellitus and psychological stress—a modifiable risk factor. *Nature Reviews Endocrinology*, *13*(9), 547–560.

Huang, Y. C., Zuniga, J., & Garcia, A. (2022). Illness perceptions as a mediator between emotional distress and management self-efficacy among Chinese Americans with type 2 diabetes. *Ethnicity & Health*, *27*(3), 672-686.

Indelicato, L., Dauriz, M., Santi, L., Bonora, F., Negri, C., Cacciatori, V., & Bonora, E. (2017). Psychological distress, self-efficacy and glycemic control in type 2 diabetes. *Nutrition, Metabolism and Cardiovascular Diseases, 27*(4), 300- 306.

Kalra, S., Jena, B.N. & Yeravdekar, R. (2018). Emotional and psychological needs of people with diabetes. *Indian Journal of Endocrinology and Metabolism, 22*(5), 696-704.

Kamau, M. W. (2022). *Factors Influencing Diet Adherence among Diabetes Mellitus Type 2 Patients Attending a Clinic at Moi Teaching and Referral Hospital, Kenya.* Doctoral dissertation, Maseno University.

Kiarie, J. N., Mambo, S. N., & Kamundi, G. K. (2023). A cross-sectional study on the association between varied social support modalities and glycemic levels amongst diabetic patients residing in Machakos County, Kenya. *The Pan African Medical Journal*, *45*, 99. https://doi.org/10.11604/pamj.2023.45.99.39472

Madroumi, R., Newson, L., Umeh, F. K., Poole, H., & Jones, A. (2024). Identifying the key components of social support for patients living with type 2 diabetes: A protocol for a systematic review and meta-analysis of type 2 diabetes social support interventions. *Plos one*, *19*(8), e0306709.

Mash, R. J., & Cairncross, J. (2023). Piloting of virtual group education for diabetes in Cape Town: An exploratory qualitative study. *South African Family Practice*, *65*(1), 1–7.

Mendenhall, E., Musau, A., Bosire, E., Mutiso, V., Ndetei, D., & Rock, M. (2020). What drives distress? Rethinking the roles of emotion and diagnosis among people with diabetes in Nairobi, Kenya. *Anthropology & Medicine,* 27(3), 252–267. https://doi.org/10.1080/13648470.2019.1650243

Morales-Brown, L. A., Perez Algorta, G., & Salifu, Y. (2024). Understanding experiences of diabetes distress: A systematic review and thematic synthesis. *Journal of Diabetes Research*, 3946553. https://doi.org/10.1155/2024/3946553

Nelson, L. A., Ackerman, M. T., Greevy Jr, R. A., Wallston, K. A., & Mayberry, L. S. (2019). Beyond race disparities: Accounting for socioeconomic status in diabetes self-care. *American journal of preventive medicine*, *57*(1), 111–116.

Njiru, L. N. (2022). *Association between Depression, Anxiety and Adherence to Treatment among Patients Attending the Kenyatta National Hospital (KNH) Diabetes Outpatient Clinic*. Doctoral dissertation, University of Nairobi.

Ojewale, L. Y., Okoye, E. A., & Ani, O. B. (2021). Diabetes self-efficacy and associated factors among people living with diabetes in Ibadan, Southwestern Nigeria. *European Journal of Medical and Health Sciences*, *3*(6), 105–110.

Otieno, F. C., Mikhail, T., Acharya, K., Muga, J., Ngugi, N., & Njenga, E. (2021). Suboptimal glycemic control and prevalence of diabetes-related complications in Kenyan population with diabetes: Cohort analysis of the seventh wave of the International Diabetes Management Practices Study (IDMPS). *Endocrine and Metabolic Science*, *3*, 100093.

Polonsky, W.H., & Henry, R. R. (2016). Poor medication adherence in type 2 diabetes: Recognising the scope of the problem and its key contributors. *Patients' Preference and Adherence,* 1299-1307.

Qin, W., Blanchette, J. E., & Yoon, M. (2020). Self-efficacy and diabetes self-management in middle-aged and older adults in the United States: A systematic review. *Diabetes Spectrum*, *33*(4), 315-323.

Ramkisson, S., Pillay, B.J., & Sibanda, W. (2017). Social support and coping in adults with type 2 diabetes. *African Journal of Primary Health Care and Family Medicine, 9*(1), 1-8.

Roy, C., Whetsell, M. V., & Frederickson, K. (2009). The Roy adaptation model and research: Global perspective. *Nursing Science Quarterly*, *22*(3), 209–211. https://doi.org/10.1177/0894318409338692

Saleh, F., Mumu, S. J., Ara, F., Begum, H. A., & Ali, L. (2012). Knowledge and self-care practices regarding diabetes among newly diagnosed in type 2 diabetics in Bangladesh: A cross-sectional study. *BMC Public Health,* 12, 1-8.

Sarkar, D., Dalal, R. K. & Sarkar, S. (2020). Study on prevalence of risk factors of diabetes among adult population in a rural area of West Bengal, India. *International Journal of Community Medicine and Public Health*, *7*(2), 701–705. doi: 10.18203/2394-6040.ijcmph20200452.

Snoek, F. J., Bremmer, M. A., & Hermanns, N. (2015). Constructs of depression and distress in diabetes: Time for an appraisal. *The Lancet Diabetes & Endocrinology*, *3*(6), 450-460.

Stephani, V., Opoku, D. & Beran, D. (2018). Self-management of diabetes in Sub-Saharan Africa: A systematic review. *BMC Public Health, 18*, 1148. https://doi.org/10.1186/s12889-018-6050-0

Zhang, Q., Sun, J., Bian, H., Wang, X., Zhang, C., Dong, K., Shen, C., & Liu, T. (2024). The relationship between hope level and self-management behaviours in Chinese patients with type 2 diabetes mellitus: A chain-mediated role of social support and disease perception. *BMC Psychology*, 12.