



Quality of Life Among Type 2 Diabetes Mellitus Patients: A Focus on Women Aged 18 and Above at Kamuzu Central Hospital, Lilongwe, Malawi.

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ABSTRACT

Type 2 Diabetes Mellitus (T2DM) profoundly affects the quality of life (QoL), particularly among women in developing countries, where healthcare access, cultural norms, and economic limitations often exacerbate the burden of disease. This study explored the QoL among women aged 18 and above living with T2DM at Kamuzu Central Hospital in Lilongwe, Malawi, with particular attention to clinical care, mental health, and social support systems. A cross-sectional survey was conducted among 150 women attending the hospital's outpatient diabetes clinic. The WHOQOL-BREF questionnaire was used alongside structured interviews to capture both quantitative and contextual data. Statistical analysis, including descriptive and regression techniques, identified key factors associated with QoL scores. Findings showed that 68% of participants experienced moderate to low QoL, with physical and psychological well-being being the most negatively impacted. Limited access to healthcare services, financial challenges, and insufficient social support emerged as major contributing factors. Conversely, women who received consistent diabetes education and reported strong family support demonstrated significantly better QoL outcomes ($p < 0.05$). The study highlights the urgent need for integrated and gender-sensitive diabetes care strategies. Improving healthcare accessibility, strengthening educational outreach, and building supportive community and family networks are essential to enhancing the QoL of women living with T2DM in Malawi.

Keywords: *Quality of Life (QoL), Type 2 Diabetes Mellitus (T2DM), Women's Health, Kamuzu Central Hospital, Mixed-Methods Research, Malawi*

1. Background of the Study

Type 2 Diabetes Mellitus (T2DM) is a chronic and progressive metabolic disorder characterized by insulin resistance and impaired glucose metabolism. It has emerged as a significant global health challenge, with the World Health Organization (WHO) reporting a growing prevalence, especially in low- and middle-income countries. In sub-Saharan Africa, and particularly in Malawi, the burden of T2DM is rising rapidly due to changing lifestyles, urbanization, and limited health infrastructure. While much of the global and regional research on T2DM has focused on clinical outcomes such as glycemic control, medication adherence, and complication rates, increasing attention is now being directed toward understanding the quality of life (QoL) of individuals living with the disease.

QoL in the context of chronic illness like T2DM refers to a person's overall well-being, encompassing physical health, emotional and psychological state, social relationships, and environmental conditions. For individuals with T2DM, QoL can be significantly compromised due to disease symptoms, comorbidities, dietary restrictions, lifelong medication use, and necessary lifestyle changes. Global studies, such as those by Schram et al. (2009) and Hernandez et al. (2013), consistently show that T2DM patients—especially women—experience lower QoL in multiple domains, including physical functioning, psychological health, and social interactions. These challenges are often compounded for women, who may also face gender-specific burdens such as caregiving responsibilities, societal expectations, hormonal fluctuations, and reduced autonomy in health decision-making.

In Africa, studies (e.g., Mash et al., 2016; Osei-Yeboah et al., 2017) underscore how limited access to healthcare services, diabetes education, and psychological support systems exacerbate the negative impact of T2DM on QoL. Despite the acknowledgment that social support plays a protective role in managing diabetes, psychosocial aspects of care remain under-addressed. In Malawi, although the burden of non-communicable diseases such as T2DM is escalating, research remains heavily concentrated on biomedical aspects like glycemic control or patient adherence to treatment. QoL, particularly from a gender-sensitive and multidimensional perspective, has received insufficient attention.

Women in Malawi are particularly vulnerable due to intersecting factors such as poverty, limited access to healthcare, domestic responsibilities, and entrenched gender norms. These social determinants can exacerbate the physical and psychological toll of living with a chronic illness. Despite being central to household and community well-being, women often have less access to health information and fewer opportunities for self-care. Existing local

studies, including those by Chiwanga et al. (2020), highlight the importance of education and support but fall short of comprehensively addressing the QoL of women with T2DM.

Kamuzu Central Hospital in Lilongwe, a major referral hospital in Malawi, serves a diverse patient population, including a growing number of women diagnosed with T2DM. However, no focused studies have examined how clinical care, mental health, and social support collectively influence the QoL of women with diabetes within this setting. This gap is particularly critical in the context of developing culturally and contextually relevant public health interventions. Without gender-sensitive, locally grounded evidence, efforts to improve diabetes care may overlook key factors that influence health outcomes and perpetuate health disparities.

This study aims to address these gaps by assessing the quality of life among women aged 18 and above living with T2DM at Kamuzu Central Hospital. It seeks to explore the role of clinical management, mental health status, and social support systems in influencing QoL, with the goal of informing more holistic and effective diabetes care strategies in Malawi. The findings will provide valuable insights for healthcare providers, policymakers, and public health stakeholders in designing targeted interventions that are sensitive to the lived experiences and unique needs of women with T2DM.

1.1. Problem Statement

Type 2 Diabetes Mellitus (T2DM) is a growing public health concern worldwide, particularly in low- and middle-income countries such as Malawi. The chronic and progressive nature of the disease often imposes a substantial burden on patients' physical, psychological, and social well-being. While considerable research has examined clinical outcomes such as glycemic control and medication adherence, the **quality of life (QoL)** of individuals with T2DM—especially women—remains underexplored, particularly in sub-Saharan African settings.

Globally, studies have established that individuals with T2DM report significantly reduced QoL, particularly in the domains of physical functioning, emotional well-being, and social engagement. For example, Schram et al. (2009) found that patients with T2DM scored lower in physical and psychological health compared to the general population. Similarly, Hernandez et al. (2013) highlighted that women experience more psychological distress and poorer QoL outcomes than men, due to caregiving burdens, hormonal fluctuations, and limited autonomy in health decision-making.

In the African context, studies by Mash et al. (2016) and Osei-Yeboah et al. (2017) emphasize that the lack of healthcare infrastructure, poor access to diabetes education, and socioeconomic stressors compound the impact of T2DM on QoL. Social support was consistently cited as a mitigating factor in QoL outcomes. These studies suggest that while clinical care is critical, psychosocial dimensions including mental health and community/family support—play an equally important role.

In Malawi, however, there is a notable dearth of research focused on the QoL of women living with T2DM. Existing studies have primarily concentrated on clinical indicators such as blood glucose control or general patient adherence (Chiwanga et al., 2020; Msyamboza et al., 2011). While a few have acknowledged the role of education and support in diabetes management, they fall short of analyzing QoL in a multidimensional way, especially among women. Most notably, no comprehensive studies have investigated how clinical care, mental health, and social support collectively influence QoL outcomes for diabetic women within the cultural and socioeconomic context of Malawi.

This gap is particularly concerning given that women in Malawi often face intersecting vulnerabilities including gender inequality, poverty, and domestic responsibilities that may exacerbate the impact of chronic diseases like T2DM. Without localized, gender-sensitive research, public health interventions may fail to address the lived realities of these women, leading to suboptimal outcomes and a perpetuation of health disparities.

1.2. Purpose of the Study

The purpose of this study is to assess the quality of life (QoL) among women aged 18 years and above who are living with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital in Lilongwe, Malawi. Specifically, the study aims to explore how clinical care, mental health status, and social support systems influence their QoL. By focusing on women within this context, the study seeks to uncover gender-specific challenges and contextual factors that affect the well-being of diabetic patients. The findings will help inform the development of holistic, gender-sensitive interventions that enhance diabetes care and improve overall QoL for women living with T2DM in Malawi.

1.3. Objectives

Main Objectives

1. To assess the overall quality of life (QoL) of women aged 18 and above diagnosed with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital.

Specific Objectives

1. To examine the impact of clinical care, including diabetes management practices, on the QoL of women with T2DM.
2. To explore the role of mental health, including stress, anxiety, and depression, in influencing the QoL of women living with T2DM.
3. To investigate the effect of social support (family, community, and healthcare networks) on the QoL of women with T2DM.

4.To identify the key socioeconomic and demographic factors that are associated with variations in the QoL among women with T2DM.

5.To provide recommendations for improving the QoL of women with T2DM through enhanced clinical care, psychosocial support, and community interventions.

1.4. Research Questions

Main Research Question:

- What is the quality of life (QoL) among women aged 18 and above with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital, and what factors influence it?

Specific Research Questions:

1. Clinical Factors:

- How do regular clinical follow-ups and access to diabetes education affect the QoL of women with T2DM?
- What is the relationship between glycemic control and the physical health domain of QoL in women with T2DM?

2. Psychological and Emotional Factors:

- To what extent do mental health issues, such as anxiety and depression, impact the QoL of women with T2DM?
- How does perceived stress relate to the psychological well-being of women with T2DM?

3. Social Support Factors:

- What role does social support, including family and community involvement, play in influencing the QoL of women with T2DM?
- Are there differences in QoL among women with T2DM based on their marital status or household dynamics?

4. Demographic and Contextual Factors:

- How do demographic factors such as age, education, and socioeconomic status influence the QoL of women with T2DM?
- Are there any cultural or societal factors specific to the Malawian context that affect the QoL of women with T2DM?

1.5. Justifying the Study

Given these findings and the identified gaps, this study seeks to explore the quality of life among women aged 18 and above with T2DM at Kamuzu Central Hospital in Lilongwe, Malawi, with a focus on clinical care, mental health, and social support systems. By addressing the unique challenges faced by women in this context, the study aims to provide actionable insights for improving diabetes care and enhancing QoL through holistic, gender-responsive health strategies.

Purpose of the Study

1.6. Significance of the Study

This study is significant for several reasons, particularly in the context of improving the quality of life (QoL) for women living with Type 2 Diabetes Mellitus (T2DM) in low-resource settings like Malawi:

1. **Addressing an Understudied Population:** While T2DM is a growing public health concern globally, there is limited research on its impact on the QoL of women in sub-Saharan Africa, particularly in Malawi. This study fills a critical gap by focusing on women, a demographic often underrepresented in health research, and highlights their unique challenges.
2. **Holistic Approach to Diabetes Management:** The study emphasizes the importance of considering psychosocial factors, such as mental health and social support, in addition to clinical care. By exploring these dimensions, it contributes to a more comprehensive understanding of diabetes management, moving beyond glycemic control to address overall well-being.
3. **Informing Healthcare Interventions:** The findings provide actionable insights for healthcare providers and policymakers. By identifying key factors that influence QoL, such as regular healthcare follow-up, mental health support, and social networks, the study offers evidence-based recommendations for designing targeted interventions that are culturally and contextually relevant.
4. **Promoting Gender-Sensitive Healthcare:** Women with T2DM often face gender-specific challenges, including caregiving responsibilities and societal expectations that can exacerbate the burden of managing their condition. This study underscores the need for gender-sensitive approaches in diabetes care to ensure that women receive adequate support to manage their health effectively.

5. **Contributing to Public Health Policy:** The insights from this study can inform public health strategies aimed at improving diabetes care in Malawi and similar settings. Integrating mental health services, strengthening social support systems, and enhancing access to regular clinical care are critical measures that can be adopted at both local and national levels.
6. **Advancing Global Health Goals:** By addressing the broader determinants of health and quality of life, this study aligns with global health goals, such as the United Nations Sustainable Development Goal 3, which seeks to ensure healthy lives and promote well-being for all. The study's findings can contribute to global efforts to reduce the burden of non-communicable diseases (NCDs) and improve the lives of those affected.
7. **Guiding Future Research:** The study lays the groundwork for future research on QoL in diabetes patients, particularly in resource-limited settings. It highlights the need for longitudinal studies and interventions that address the interplay of clinical, psychological, and social factors in diabetes care.

2.0. Review of Literature:

2.1. Introduction to Quality of Life in Chronic Illness

Quality of life (QoL) has emerged as a critical parameter in the management of chronic illnesses like Type 2 Diabetes Mellitus (T2DM). It encompasses physical, psychological, social, and environmental dimensions that influence an individual's overall well-being. The World Health Organization Quality of Life (WHOQOL) framework is frequently employed to evaluate these domains.

2.2. Global Perspective on QoL in T2DM

Globally, studies highlight that T2DM significantly impacts QoL due to the interplay of physical symptoms, treatment regimens, and psychosocial challenges. A systematic review by Schram et al. (2009) indicated that patients with T2DM exhibit lower scores in physical and psychological health domains compared to the general population. Factors such as comorbidities, disease duration, and glycemic control were strong determinants of QoL.

2.3. African Context: QoL and T2DM

In sub-Saharan Africa, limited resources and health infrastructure pose additional challenges for T2DM management. Studies in Kenya, Nigeria, and South Africa reveal that the economic burden, lack of access to medications, and inadequate education on diabetes self-management exacerbate QoL issues. For instance, Mash et al. (2016) found that social support played a pivotal role in mitigating the negative impacts of diabetes on QoL in African patients.

2.4. Gendered Experiences in Diabetes Management

Women with T2DM often report worse QoL outcomes compared to men. Hormonal fluctuations, caregiving roles, and societal expectations may amplify their vulnerability to poor psychological and physical health outcomes. A study by Hernandez et al. (2013) observed that women with T2DM were more likely to report higher levels of anxiety, depression, and stress, leading to lower QoL scores.

2.5. Studies on QoL in Malawi

In Malawi, the burden of non-communicable diseases, including T2DM, is on the rise. However, studies focusing on QoL among diabetes patients are sparse. Research conducted at Queen Elizabeth Central Hospital in Blantyre highlighted the role of education and social support in improving glycemic control and QoL (Chiwanga et al., 2020). Women, particularly those in lower socioeconomic brackets, faced significant barriers to achieving optimal QoL due to limited healthcare access and cultural factors.

2.6. Psychological Well-being and QoL

Psychological well-being is a critical determinant of QoL among T2DM patients. Depression and anxiety are prevalent in this population, with a bidirectional relationship observed between glycemic control and mental health. Studies consistently show that psychological interventions can significantly improve QoL in diabetic patients by addressing stress, depression, and coping mechanisms.

2.7. Social Support and QoL

Social support has been identified as a key factor influencing QoL in T2DM patients. Support from family, friends, and community networks aids in managing the disease and mitigating its psychological burden. For women, especially, robust social support systems have been linked to better adherence to treatment and improved QoL scores.

2.8. Gaps in the Literature

While there is growing recognition of the importance of QoL in T2DM management, significant gaps remain, particularly in the Malawian context. Few studies explore the intersection of gender, mental health, and social support in influencing QoL. Additionally, the cultural nuances that shape women's experiences with diabetes management in Malawi warrant further investigation.

2.9. Conclusion

The review underscores the multifaceted nature of QoL among women with T2DM, influenced by physical health, psychological well-being, social support, and environmental factors. Addressing these dimensions holistically is essential for improving outcomes. Future research in Malawi should focus on tailored interventions that account for cultural and gender-specific factors to enhance QoL in this population.

3.0. Research Methodology

3.1. Study Design

This study utilized a cross-sectional design to assess the quality of life (QoL) among women aged 18 and above diagnosed with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital, Malawi. A cross-sectional design was chosen as it allows for the collection of data at a single point in time, providing a snapshot of the QoL and associated factors among the target population.

3.2. Study Population

The study population consisted of women aged 18 and above who were diagnosed with T2DM and attended the outpatient clinic at Kamuzu Central Hospital. A convenience sampling method was used to recruit participants from the hospital's diabetes care clinic over a 6-month period. Women with a diagnosis of T2DM, confirmed through medical records, who were able to consent to the study, were included in the study. Women who were critically ill or unable to participate due to language or cognitive barriers were excluded.

3.3. Sample Size

A total of 150 women were targeted for inclusion in the study. The sample size was determined based on an estimated prevalence of T2DM in women, with a confidence level of 95% and a margin of error of 5%. The study sought to achieve a sufficient sample to enable robust statistical analyses.

3.4. Data Collection Tools:

1. WHOQOL-BRIEF Questionnaire

The World Health Organization Quality of Life-BREF (WHOQOL-BREF) instrument was used to assess the overall QoL of participants. This 26-item questionnaire measures four major domains: physical health, psychological health, social relationships, and environmental factors. The WHOQOL-BREF has been validated in various settings and provides a comprehensive assessment of QoL across diverse populations.

2. Semi-structured Interviews

In addition to the WHOQOL-BREF, semi-structured interviews were conducted to capture more in-depth qualitative data. These interviews focused on participants' experiences with clinical care, the psychological impact of T2DM, and the role of social support systems. The interviews were guided by a set of open-ended questions but allowed flexibility to explore issues as they arose.

3. Demographic Information

A questionnaire was administered to collect demographic data (e.g., age, marital status, educational level, employment status) and clinical information (e.g., duration of T2DM, comorbidities, treatment regimen).

3.5. Data Collection Procedure

Data were collected by trained research assistants who were fluent in both English and Chichewa, ensuring effective communication with participants. Women were approached in the outpatient clinic, and those who consented were invited to complete the WHOQOL-BREF questionnaire. Following the survey, participants were invited to take part in semi-structured interviews. All data were collected in private settings to ensure confidentiality and comfort for the participants. Informed consent was obtained from all participants, and ethical approval was granted by the institutional review board at Kamuzu Central Hospital.

3.6. Data Analysis

Quantitative data from the WHOQOL-BREF and demographic questionnaires were analyzed using **descriptive statistics** (e.g., means, standard deviations) to summarize participants' QoL scores across the four domains. Bivariate analyses, such as **t-tests** and **ANOVA**, were used to explore the relationships between QoL scores and demographic and clinical variables (e.g., age, education level, diabetes duration, treatment type).

Multivariate regression analysis was performed to identify the key factors (e.g., clinical care, mental health, social support) associated with variations in QoL scores. A **p-value of <0.05** was considered statistically significant.

Qualitative data from the semi-structured interviews were transcribed verbatim and analyzed using **thematic analysis**. This method allowed for the identification of recurring themes related to participants' experiences with diabetes management, psychological impacts, and social support systems. Codes were generated from the interview transcripts, and these were grouped into broader themes to provide a rich, context-specific understanding of the factors influencing QoL.

3.7. Ethical Consideration

The study adhered to ethical principles of respect, confidentiality, and voluntary participation. Informed consent was obtained from all participants, and they were assured of their right to withdraw from the study at any time without consequence. Data were anonymized and stored securely to ensure privacy. The study was approved by the ethics committee at Kamuzu Central Hospital.

4.0. Results and Discussion

A total of 150 women aged 18 and above with Type 2 Diabetes Mellitus (T2DM) participated in this study. The mean age of participants was 52.4 years (SD = 10.2), with the majority (68%) falling within the age group of 40–60 years. The average duration of diabetes among participants was 7.3 years (SD = 4.1). A summary of the demographic and clinical characteristics of the participants is provided in **Table 1**.

Table 1: Demographic and Clinical Characteristics of Participants

Characteristic	N (%)
Age Group	
18-39 years	15 (10%)
40-59 years	102 (68%)
60+ years	33 (22%)
Marital Status	
Married	120 (80%)
Single/Separated/Divorced	30 (20%)
Education Level	
No formal education	35 (23%)
Primary education	80 (53%)

Characteristic	N (%)
Secondary or higher	35 (23%)
Duration of Diabetes	7.3 years (SD = 4.1)
Comorbidities	
Hypertension	70 (47%)
Dyslipidemia	40 (27%)
Obesity	60 (40%)

Quality of Life Assessment

The overall QoL scores of the women with T2DM were moderately low, with the **mean physical health score** being 47.2 (SD = 14.5), the **mean psychological health score** being 43.6 (SD = 12.2), the **mean social relationships score** being 51.5 (SD = 15.3), and the **mean environmental health score** being 50.8 (SD = 13.8). The most significant reduction in QoL was observed in the physical health domain, followed by psychological health. Participants reported greater satisfaction with social relationships and environmental factors,

Clinical Care and QoL

Participants who reported receiving regular diabetes education and follow-up care had significantly higher QoL scores across all domains.

Table 2 shows the comparison between participants with regular healthcare follow-up and those without, highlighting the difference in mean QoL scores for each domain.

Table 2: QoL Scores Based on Healthcare Follow-up

Follow-up Care	Physical Health (Mean, SD)	Psychological Health (Mean, SD)	Social Relationships (Mean, SD)	Environmental Health (Mean, SD)
Regular	53.4 (12.3)	49.7 (11.8)	58.4 (14.7)	57.2 (12.5)
Irregular	42.1 (16.2)	38.6 (13.5)	45.8 (16.1)	44.9 (14.2)

Note: *p*-value < 0.05 for all comparisons.

Mental Health and QoL

Psychological well-being was a major determinant of QoL in this cohort. Women with higher levels of anxiety and depression reported significantly lower QoL scores, especially in the psychological health and physical health domains. Depicts the relationship between depression severity and QoL scores, with women showing higher depression scores correlating with lower QoL.

Social Support and QoL

Social support was a critical factor in enhancing QoL. Women who had strong family and community support networks reported significantly better QoL scores across the physical, psychological, and social relationships domains. **Table 3** provides a summary of QoL scores based on perceived social support.

Table 3: QoL Scores Based on Perceived Social Support

Social Support	Physical Health (Mean, SD)	Psychological Health (Mean, SD)	Social Relationships (Mean, SD)	Environmental Health (Mean, SD)
Strong	55.6 (10.5)	53.2 (10.1)	60.2 (13.4)	59.8 (11.7)
Weak	43.5 (15.4)	39.1 (14.7)	47.9 (16.8)	47.3 (14.9)

Socioeconomic and Demographic Factors

Age, education, and marital status were found to be associated with differences in QoL scores. Younger women and those with higher levels of education tended to report better QoL, particularly in the social relationships and environmental health domains. Married women also showed slightly higher QoL scores compared to single or divorced women, especially in the physical and social domains.

Discussion

This study aimed to assess the quality of life (QoL) among women aged 18 and above diagnosed with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital. The findings from this study provide valuable insights into the multifaceted impacts of T2DM on QoL, highlighting the significant role of clinical care, mental health, and social support in shaping the overall well-being of these women.

QoL among Women with T2DM

Our study found that the QoL of women with T2DM was moderately low, with the physical health and psychological health domains being most affected. These results are consistent with previous research indicating that T2DM negatively impacts both physical and mental health. Studies from other settings, including sub-Saharan Africa, have similarly reported that individuals with T2DM experience significant reductions in QoL, particularly in the physical health domain due to the chronic nature of the disease and its associated complications (Basu et al., 2020; Umeh et al., 2017). The higher psychological distress observed in our sample further underscores the burden of managing a chronic disease, which can contribute to feelings of helplessness, anxiety, and depression (Ali et al., 2018).

The lower QoL in the physical health domain can be attributed to several factors. Women in this study reported limitations in daily activities, frequent fatigue, and physical discomfort associated with T2DM and its complications, such as neuropathy and hypertension. These findings echo those of other studies, which suggest that chronic illnesses like T2DM significantly impair the ability to perform everyday tasks, thus decreasing overall physical well-being (Sierra et al., 2019).

Role of Clinical Care in QoL

A key finding of this study is the significant positive association between regular healthcare follow-up and improved QoL scores. Women who attended regular follow-up visits and received diabetes education reported better QoL across all domains. This result is in line with several studies that have highlighted the importance of continuous healthcare engagement and diabetes education in improving the health outcomes and QoL of patients (Henderson et al., 2017). Regular follow-up care helps in better management of blood glucose levels, which can reduce the risk of complications and subsequently improve physical health and psychological well-being (Chaudhry et al., 2020). The findings suggest that increasing access to healthcare and reinforcing the importance of regular follow-up visits may be key interventions in improving QoL among women with T2DM in resource-limited settings like Malawi.

Psychological Health and QoL

Psychological health emerged as a major determinant of QoL in this study, with women experiencing high levels of anxiety and depression reporting significantly lower QoL scores. This is consistent with the literature, which has repeatedly shown that T2DM is closely linked to poor mental health outcomes. A study by Goetz et al. (2016) found that depression is highly prevalent among women with T2DM and negatively impacts their ability to manage their condition effectively. Our study further reinforces the need for integrated care models that address both the physical and psychological aspects of diabetes management. Mental health interventions, such as counseling or support groups, could play a critical role in enhancing the QoL of women with T2DM by alleviating symptoms of anxiety and depression and improving coping strategies.

Social Support and QoL

Social support was another key factor influencing the QoL of women in this study. Women with strong family and community support networks reported significantly better QoL scores across the physical, psychological, and social domains. These findings are consistent with previous research that highlights the protective role of social support in chronic disease management. Studies have shown that social support can reduce the perceived burden of illness, increase adherence to treatment regimens, and improve mental health outcomes (Wells et al., 2019). In the context of T2DM, where self-management is crucial, emotional and practical support from family members and the community can help mitigate the challenges associated with the disease. Therefore,

promoting community-based support systems and family involvement in diabetes care may be an effective strategy to improve the QoL of women with T2DM in Malawi and similar settings.

Socioeconomic and Demographic Factors

The study also revealed that younger women and those with higher levels of education reported better QoL, particularly in the social relationships and environmental health domains. This finding aligns with the broader literature on health inequalities, which consistently shows that higher socioeconomic status and education are associated with better health outcomes and higher QoL (Marmot et al., 2012). The relatively lower QoL reported by older women may be attributed to the compounded effects of aging and diabetes, as older adults are more likely to experience comorbidities and physical disabilities that affect their overall health. Additionally, women with lower educational attainment may face greater barriers to understanding diabetes management, which can affect their physical and psychological well-being.

Implications for Public Health and Policy

The findings from this study have important implications for public health and policy in Malawi. First, there is a need for more accessible and sustainable diabetes care services that incorporate regular follow-up visits and diabetes education. Efforts to integrate mental health services into diabetes care are also crucial, as addressing psychological well-being can lead to better clinical outcomes and improved QoL. Social support should also be recognized as a key factor in diabetes management, and strategies to enhance family and community involvement in care should be prioritized.

Additionally, healthcare providers should be trained to recognize the unique challenges faced by women with T2DM, particularly in terms of gender-specific barriers such as caregiving responsibilities and cultural expectations. Tailoring interventions to meet the needs of women, including the provision of gender-sensitive education and support, could help mitigate the gender disparities in health outcomes and QoL.

Limitations and Future Research

This study has some limitations. First, the cross-sectional design does not allow for the assessment of causal relationships between clinical care, social support, mental health, and QoL. Future longitudinal studies would provide a more robust understanding of these relationships over time. Additionally, the use of convenience sampling limits the generalizability of the findings, and further studies should consider random sampling to enhance the representativeness of the population. Future research could also explore the role of specific interventions, such as community-based programs and mental health support, in improving the QoL of women with T2DM.

5.0. Conclusion

This study provides valuable insights into the quality of life (QoL) of women aged 18 and above living with Type 2 Diabetes Mellitus (T2DM) at Kamuzu Central Hospital, Malawi. The findings reveal that women with T2DM experience significant challenges in terms of physical health, psychological well-being, and social support, all of which are crucial components of QoL. Specifically, participants reported lower QoL scores in the physical and psychological health domains, with mental health issues such as anxiety and depression playing a prominent role in reducing overall well-being.

Key factors influencing QoL were identified, including the importance of regular clinical care and diabetes education, the significant role of mental health, and the beneficial effects of social support. Women who had access to regular healthcare follow-up and those with strong family and community support reported better QoL across all domains. This highlights the need for a holistic approach to diabetes care that includes both medical management and psychosocial support.

6.0. Practical Recommendations:

1. **Enhance Access to Diabetes Care:** Efforts should be made to ensure that women with T2DM have access to regular follow-up visits and diabetes education programs. Regular monitoring and personalized care can significantly improve the physical and psychological aspects of diabetes management.
2. **Integrate Mental Health Services:** Given the high levels of anxiety and depression observed in participants, integrating mental health services into diabetes care is essential. Psychological support, including counseling, therapy, and support groups, should be incorporated into the standard care for women with T2DM.
3. **Promote Social Support Networks:** Community-based initiatives and family involvement in diabetes care can enhance social support for women with T2DM. Programs aimed at strengthening family support and fostering community engagement can alleviate the burden of managing the disease and improve QoL.
4. **Tailor Interventions to Gender-Specific Needs:** Gender-sensitive approaches are necessary to address the unique challenges faced by women with T2DM, such as caregiving roles and cultural expectations. Healthcare interventions should be designed with these considerations in mind to ensure that women receive the support they need to manage their condition effectively.

5. **Increase Public Awareness and Education:** There is a need for increased awareness and education about T2DM, particularly in rural and underserved areas. Public health campaigns should target women and emphasize the importance of early detection, regular screening, and diabetes management to prevent complications and improve long-term outcomes.

In conclusion, improving the QoL of women with T2DM in Malawi requires a multifaceted approach that addresses clinical care, mental health, and social support. By prioritizing these factors, healthcare providers, policymakers, and community leaders can help enhance the well-being of women living with T2DM and reduce the burden of the disease on individuals and the healthcare system.

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