



## QUALITY OF LIFE (QOL) AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS ATTENDING OUTPATIENT DEPARTMENTS OF SELECTED HOSPITALS., MANGALURU

Mrs. Laisy PK\* | Dr. Venu Lata Saxena\*\*

\*Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.

\*\*Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.

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### ABSTRACT

The present study assessed the quality of life (QOL) among patients with type 2 diabetes mellitus attending outpatient departments of selected hospitals in Mangaluru. Methodology: A descriptive research design was adopted, and 50 patients were selected using purposive sampling technique. Data were collected using a demographic proforma and the WHOQOL-BREF scale. Results: The findings showed that the highest mean score was in the social relationship domain ( $29.44 \pm 7.66$ ), while the psychological health domain had the lowest mean score ( $25.64 \pm 8.27$ ). No significant association was found between demographic variables and QOL scores ( $p > 0.05$ ). Conclusion: The study highlights the need for holistic diabetic care with emphasis on psychological well-being.

**Key words:** Type 2 diabetes mellitus, quality of life, WHOQOL-BREF, diabetic patients.

### ABOUT AUTHORS:



Author, Mrs. Laisy PK is a Ph.D. Scholar at Himalayan University, Itanagar, Arunachal Pradesh, India.



Author, Dr. Venu Lata Saxena is Ph.D. Guide at Himalayan University, Itanagar, Arunachal Pradesh, India. She is active researcher with many publications in his name. She has attended and organized various National and International conferences.



## INTRODUCTION

Diabetes mellitus (DM) is a group of metabolic disorders characterized by chronic hyperglycemia along with disturbances in carbohydrate, fat, and protein metabolism. It results from defects in insulin secretion, insulin action, or both. A person with DM is one who has been clinically diagnosed with the condition. An individual is generally considered diabetic when random blood glucose levels are  $\geq 126$  mg/dl and/or when using insulin or oral hypoglycemic medications (Indian Council of Medical Research, 2018).

The IDF reports that while incidence rates are stabilizing or declining in developed countries, there is a rapid rise in T2DM cases in developing nations (Misra, 2019). In response to this growing burden, global health efforts, including those of the United Nations, aim to reduce premature mortality from non-communicable diseases such as diabetes (WHO, 2016). Although glycemic control remains the cornerstone of T2DM management, treatment also involves comprehensive strategies including lifestyle modification, appropriate use of oral antidiabetic agents, and insulin therapy when required (Rodriguez-Gutierrez, 2016; Hanefeld, 2020).

The World Health Organization (WHO) defines quality of life (QoL) as “an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”. (WHOQOL Group, 1994). QoL is widely recognized as a vital health outcome, and achieving a good QoL is considered a primary goal in the management of chronic diseases (Skevington, 2014).

T2DM patients experience both psychological and physical burden; hence, QoL should be a key priority in disease management. QoL becomes further compromised in patients with complications such as retinopathy, nephropathy, and neuropathy, as these conditions increase psychological self-care practices and emotional disself-care practices (Trikkalinou, 2017).

QoL is reduced in patients with diabetes and becomes further worse when complications or comorbidities are present (Trikkalinou, 2017). Diabetes affects physical well-being in several ways: (1) by causing long-term complications, (2) through acute complications, (3) due to treatment-related demands, and (4) through psychological impact on mood and functioning. For example, persistent fatigue may occur due to hyperglycemia, while hypoglycemia can also lead to weakness and disself-care practices. Both conditions negatively influence overall well-being. Social well-being is also affected, as diabetes can interfere with relationships and social interactions (Polonsky, 2000).

Type 2 Diabetes Mellitus significantly affects the quality of life of patients due to its chronic nature, lifelong treatment requirements, and associated complications. Beyond physical health problems, diabetes also influences psychological, emotional, and social well-being, thereby reducing the overall quality of life of affected individuals. Adequate knowledge regarding quality of life and self-care practices plays a crucial role in helping patients manage their condition effectively and prevent complications. Assessing the knowledge of patients regarding QoL can help healthcare professionals identify gaps in awareness and implement appropriate educational interventions. Therefore, improving patient knowledge and promoting holistic diabetes management strategies are essential to enhance the quality of life among patients with Type 2 Diabetes Mellitus attending outpatient departments.

### **Aim of the study:**

The aim of the study is to assess Quality of Life (QOL) among patients with type 2 diabetes mellitus attending outpatient departments of selected hospitals., Mangaluru.

### **Objectives of the study:**

1. To assess the knowledge regarding Quality of Life (QOL) among patients with type 2 diabetes mellitus attending outpatient departments of selected hospital.
2. To find an association between Quality of Life (QOL) among patients with type 2 diabetes mellitus attending outpatient departments of selected hospital and their selected demographic variables.

### **Research Methodology**

Descriptive research design was implemented. A total of 50 patients with type 2 diabetes mellitus attending outpatient departments of selected hospital were selected using purposive sampling technique. Demographic proforma and WHOQOL-BREF scale was used to collect the data. Pilot study was conducted and was found to be feasible.



## RESULTS

The results revealed the following findings:

### Section 1: Distribution of demographic variables

Regarding age majority 18 (36%) were in the age group of above 51 years, most 26 (52%) of them were female, 26 (52%) of them had diabetes for less than one year.

### Section 2: Quality of life among patients with type 2 diabetes mellitus in terms of domain wise range, mean and standard deviation

**Table 1: Overall Mean and SD of quality of life among patients with type 2 diabetes mellitus.**

QOL	Mean	SD
Physical health	28.06	6.24
Psychological health	25.64	8.27
Social relationship	29.44	7.66
Environment	29.34	8.06

The table depicts the mean and standard deviation scores of the Quality of Life (QOL) domains among the participants. Among the four domains, the highest mean score was observed in the social relationship domain ( $29.44 \pm 7.66$ ), followed by the environment domain ( $29.34 \pm 8.06$ ). The physical health domain had a mean score of  $28.06 \pm 6.24$ , while the psychological health domain showed the lowest mean score ( $25.64 \pm 8.27$ ). The findings indicate that participants had relatively better quality of life in social relationships and environmental aspects, whereas psychological health was comparatively lower.

### Section 3: Association of demographic variables with knowledge scores.

As the p-values interpreted using Chi-square test are greater than 0.05, there is no significant association between demographic variables and QOL among type 2 diabetes mellitus patients.

## DISCUSSION

The present study assessed the Quality of Life (QOL) among patients with type 2 diabetes mellitus attending outpatient departments of selected hospitals in Mangaluru using the WHOQOL-BREF scale. Diabetes mellitus is a chronic metabolic disorder that significantly affects the physical, psychological, social, and environmental aspects of an individual's life. Therefore, assessment of QOL is essential in understanding the overall well-being of diabetic patients and planning holistic care interventions.

In the present study, the highest mean score was observed in the social relationship domain ( $29.44 \pm 7.66$ ), followed by the environment domain ( $29.34 \pm 8.06$ ). This finding suggests that participants had relatively satisfactory interpersonal relationships, family support, and social interactions. Similar findings were reported by Gautam et al., who observed that social support plays a significant role in improving coping abilities and treatment adherence among diabetic patients. Good family and social support may help patients manage the stress associated with long-term disease management.

The environment domain also showed comparatively higher scores, indicating that participants perceived adequate access to health services, financial resources, safety, and living conditions. This finding may be attributed to the accessibility of healthcare facilities and regular follow-up services available in the selected hospitals. Comparable findings were reported by Rwegerera et al., who found that supportive environmental conditions positively influence the quality of life among patients with diabetes mellitus.

The physical health domain mean score was  $28.06 \pm 6.24$ , reflecting moderate quality of life related to pain, fatigue, sleep, mobility, and activities of daily living. Diabetes-related complications, dietary restrictions, and the burden of continuous treatment may negatively affect physical functioning. Similar observations were reported in studies conducted by Rubin and Peyrot, which highlighted that chronic illness and long-term medication use adversely influence physical well-being in diabetic patients.

Among all domains, the psychological health domain had the lowest mean score ( $25.64 \pm 8.27$ ), indicating poorer psychological well-being among the participants. Chronic stress, anxiety regarding complications, fear of dependency, and lifestyle modifications associated with diabetes may contribute to reduced psychological health. This finding is consistent with studies by Lloyd et al., who reported increased prevalence of stress, anxiety, and depressive symptoms among individuals with type 2 diabetes mellitus. Psychological distress can further affect self-care practices and glycaemic control, thereby reducing overall quality of life.



The present study also found no significant association between demographic variables and quality of life scores among patients with type 2 diabetes mellitus. The findings suggest that QOL may be influenced by multiple factors beyond demographic characteristics, including disease duration, self-management practices, family support, presence of complications, and treatment adherence. Similar findings were reported in previous studies where demographic variables did not show significant association with overall quality of life scores.

### Implications of the study

The findings of the present study have important implications for nursing practice, education, administration, and research. The study emphasizes the need for comprehensive assessment of quality of life among patients with type 2 diabetes mellitus as an integral component of routine diabetic care. Since the psychological health domain showed comparatively lower scores, healthcare professionals, especially nurses, should focus on providing psychological support, counselling, and health education to enhance patients' coping abilities and self-management practices. The findings also highlight the importance of incorporating quality of life assessment tools such as the WHOQOL-BREF into nursing education and clinical practice to promote holistic patient care. Nursing administrators may utilize these findings to organize diabetes education programs, counselling services, and support groups aimed at improving the overall well-being of diabetic patients. Furthermore, the study provides baseline data for future research and indicates the need for larger interventional studies to evaluate strategies for improving the quality of life among patients with type 2 diabetes mellitus.

### CONCLUSION

Overall, the study findings emphasize the importance of comprehensive diabetes management programs focusing not only on glycemic control but also on psychological counseling, social support, lifestyle modification, and patient education to improve the overall quality of life among patients with type 2 diabetes mellitus.

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