

ORIGINAL RESEARCH

Study of Evaluation of quality of life among diabetics visited to tertiary care centre

Nandeshwar Amardip Anna¹, Pradeep Kumar DP², Raghav³

¹Assistant Professor, Department of Community Medicine, Gouri Devi Institute of Medical Sciences and Hospital, Durgapur, West Bengal, India.

²Assistant Professor, Department of Community Medicine, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda, Telangana, India.

³Assistant Professor, Department of Community Medicine, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda, Telangana, India.

Corresponding Author:

Nandeshwar Amardip Anna

Assistant Professor, Department of Community Medicine, Gouri Devi Institute of Medical Sciences and Hospital, Durgapur, West Bengal, India.

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ABSTRACT

Background: The present study was conducted for evaluate the quality life among diabetics in a tertiary care centre. **Materials & Methods:** 200 patients with presence of type 2 diabetes were enrolled. Complete demographic and clinical details of all the patients was obtained. Complete demographic and clinical details of all the patients was obtained. All information of the patients was recorded in an ethically approved predesigned proforma. The patient's demographic profile and anthropometric variables were assessed. Hematological and biochemical profile was also evaluated. A 34-item scale Quality of Life Instrument for Indian Diabetes Patients (QOLID) was used to assess QoL of the patients. It uses a standard Likert scale across all questions. All the results were recorded in Microsoft excel sheet followed by statistical analysis using SPSS software. **Results:** While assessing the quality of life overall, good score was seen in 69.5 percent of the patients. Also, while evaluating the overall quality of life, good quality of life was measured in 70.5 percent of the patients. **Conclusion:** Diabetes does effects of quality of life of patients at some or the other phase of life and disease.

Key words: Diabetes, Quality of life

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INTRODUCTION

Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction, and failure of various organs, especially the eyes, kidneys, nerves, heart, and blood vessels.^{1,2}

Type 1 diabetes accounts for 5% to 10% of all cases of diabetes. Its risk factors include autoimmune, genetic, and environmental factors. To date, there are no known ways to prevent type 1 diabetes. Type 2 diabetes accounts for 90% to 95% of all diagnosed diabetes cases. This form of diabetes generally begins as insulin resistance and, because the body is unable to produce enough insulin to address the resistance, the pancreas may reduce the production of insulin or eventually stop producing it.^{3,4}

Although the pathogenesis of diabetes is complex, a number of factors that increase the risk for the disease

have been identified. Risk factors for type 1 diabetes include family history, race (with whites at higher risk than other racial or ethnic groups), and certain viral infections during childhood. Risk factors for type 2 diabetes are more diverse; some are modifiable, and others are not.^{5,6}

Hence; the present study was conducted for evaluation of quality life among diabetics in a tertiary care centre.

MATERIAL AND METHODS

The present study was conducted for assessing quality of life among diabetics in a tertiary care centre. A total of 200 patients with presence of type 2 diabetes were enrolled.

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patient's demographic profile and anthropometric variables were assessed. Hematological and biochemical profile was also evaluated. A 34-item scale Quality of Life Instrument for Indian Diabetes Patients (QOLID) developed and validated by Nagpal et al. was used to assess QoL of the patients.⁷ It is a sensitive tool for the assessment of health-related and diabetes-specific QoL in patients with type -2 DM in India. It uses a standard Likert scale across all questions. All the results were recorded in Microsoft excel sheet followed by statistical analysis using SPSS software.

RESULTS

Mean age of the patients was 51.2 years. Majority proportion of the patients were males. Mean Physical QoL score, Psychological QoL score, Social QoL score, Environmental QoL score and Total QoL score was found to be 61.1, 66.8, 42.3, 68.7 and 60.3 respectively. While assessing the quality of life overall, good score was seen in 69.5 percent of the patients. Also, while evaluating the overall quality of life, good quality of life was measured in 70.5 percent of the patients.

Table 1: Quality of life score

Domains (max 100)	Mean	SD
Physical QoL score	61.1	15.9
Psychological QoL score	66.8	20.1
Social QoL score	42.3	19.8
Environmental QoL score	68.7	16.2
Total QoL score	60.3	19.4

Table 2: Quality of life assessment

Domains (max 100)	Good score ($\geq 50\%$)	Poor score ($< 50\%$)
Physical QoL score	132	68
Psychological QoL score	143	57
Social QoL score	43	157
Environmental QoL score	88	112
Total QoL score	139	61

Table 3: Measured overall quality of life

Measured overall quality of life	Number	Percentage
Good	141	70.5
Poor	59	29.5
Total	200	100

DISCUSSION

Chronic diseases such as diabetes and hypertension need lifelong treatment and daily self-management. Most health interventions aim to improve the quality of life of persons affected by disease. The quality of life is a vital component in disease management, because a poor quality of life leads to diminished self-care that in turn leads to worsened disease control, increased risks for complications, and exacerbation of disease. Higher burden of the disease and complications would in turn increase hospitalization and contribute to higher health care costs. Thus, it is apparent that the quality-of-life issues are imperative and predict how well an individual would be able to handle his disease and maintain his long-term health and well-being.⁸⁻¹⁰ Hence; the present study was conducted for assessing quality of life among diabetics in a tertiary care centre.

Mean age of the patients was 51.2 years. Majority proportion of the patients were males. Mean Physical QoL score, Psychological QoL score, Social QoL

score, Environmental QoL score and Total QoL score was found to be 61.1, 66.8, 42.3, 68.7 and 60.3 respectively. As Snoek et al describes after World War II and the introduction of new medicines, the numbers of patients with chronic diseases increased continually. In parallel there was a growing need for evaluation of treatments in terms of medical efficacy but also in terms of everyday life improvement as patients understood it. No sooner than 1976 was the concept of QoL included in the Index Medicus.¹¹ In 1997, the World Health Organization (WHO) introduced the first definition of health as "A state of complete physical, mental, and social well-being not merely the absence of disease". WHO, furthermore, introduced QoL as an estimation of well-being as well as a the measurement of health and the effects of health care. WHO defined QoL as 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. Therefore, except for person's physical

health definition of QoL includes psychological state, level of person's independence, social life and personal beliefs.¹²

Manjunath K et al assessed the QoL of patients attending the diabetic clinic using the World Health Organization (WHO) QoL BREF instrument in Tamil Nadu. The QoL was analyzed domain-wise and various socio-demographic factors affecting the QoL were studied. The mean total score of the QoL scale was 58.05. Domain-wise, 63% had good physical, 69% had good psychological, 27% had good social and 85% had good environmental QoL scores. Males, currently married and those with BMI more than 25 had a statistically significantly better QoL compared to their counterparts. Diabetes does impair the QoL of patients but not to a great extent.¹³

While assessing the quality of life overall, good score was seen in 69.5 percent of the patients. Also, while evaluating the overall quality of life, good quality of life was measured in 70.5 percent of the patients. Parik PC et al, in a previous study, assessed the health-related quality of life of Type 2 Diabetes mellitus patients attending outpatient departments of a tertiary hospital using EQ-5D-5L. Out of total 358 participants, 208 had comorbidities, hypertension being the most common. Mean age was 60.71 ± 11.41 years and 216 (58.9%) were female participants. Out of five dimensions, Mobility, Self-care, Usual activities, and Pain/discomfort were most affected in age group 71 years and above while anxiety/depression affected age group 18–30 years the most. Mean EQ VAS score was 78.83 ± 15.02 . Female participants had significantly higher EQ VAS score ($P = 0.00$) than male participants. EQ VAS score showed significant negative correlation with uncontrolled state of diabetes ($P = 0.000$). There was significant difference in EQ VAS score between patients with and without comorbidities. ($P = 0.004$) Cronbach alpha for EQ-5D-5L was 0.76. The results suggested that EQ-5D-5L is a reliable measure for assessing health related quality of life of patients with Type 2 Diabetes mellitus. Type 2 Diabetes adversely affects the quality of life of patients.¹⁴

CONCLUSION

Diabetes does effects of quality of life of patients at some or the other phase of life and disease.

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