

Determinants of Quality of life of patients with Type 2 Diabetes Mellitus in Lagos, Nigeria

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Abstract

Background: Diabetes Mellitus (DM) is a chronic disease with a dismal effect on the quality of life (QoL). Morbidity/mortality can be reduced by good metabolic control and other cardiovascular risk factors.

Objectives: The purpose of this study was to evaluate the determinants of metabolic control and QoL in Type 2 Diabetes Mellitus (T2DM) subjects in Lagos, Nigeria.

Methodology: This was a cross sectional study involving 142 consenting adult subjects with T2DM attending the Diabetes clinic of the Lagos University Teaching Hospital, Lagos, Nigeria. HbA1c (Glycosylated Haemoglobin), FPG (Fasting Plasma Glucose), TC (Total Cholesterol), TG (Triglyceride), HDL-C (High Density Lipoprotein Cholesterol), LDL-C (Low Density Lipoprotein Cholesterol), Quality of life (QoL) scores using a generic QoL questionnaire SF-36 and self-care scores using SCI-R questionnaire were obtained.

Results: Mean age was 53.77 ± 7.84 years. 57% were females. Total QoL was negatively correlated with HbA1c ($r = -0.346$, $p < 0.001$), FPG ($r = -0.171$, $p = 0.042$), TC ($r = -0.165$, $p = 0.049$), positively correlated with self-care ($r = 0.240$, $p = 0.004$). Mental health (MH) was positively correlated with age ($r = 0.247$, $p = 0.003$), self-care ($r = 0.190$, $p = 0.024$), physical functioning ($r = 0.291$, $p < 0.001$) and negatively correlated with SEC ($r = -0.246$, $p = 0.003$), HbA1c ($r = -0.228$, $p = 0.006$) and FPG ($r = -0.177$, $p = 0.035$). Males had significantly higher MH scores 75.39 ± 13.79 vs 70.07 ± 14.68 ($p = 0.030$) and physical functioning scores 81.31 ± 15.86 vs 73.27 ± 18.05 ($p = 0.006$).

Conclusion: Patients with lower HbA1c, FPG, total cholesterol (good metabolic control) and better self-care behaviours have better QoL. Male gender was associated with significantly higher mental health and physical functioning. Older patients had better mental health. Poor patients had lower mental health, general health and self-care.

Key words: Type 2 Diabetes Mellitus, Glycaemic Control, Atherogenic Index of Plasma, Quality of Life, Self-Care Behaviour