



Appraisal Of Quality Of Life Of Diabetic Patients, Including Life Expectancy

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ABSTRACT

Objective: To review the literature on quality of life of diabetic patients, and the impact it has on their life expectancy.

Data Base: Medline, pubmed, google scholar.

Key words: Type 2 Diabetes, quality of life, life expectancy, diabetic complications.

Results: Of the several articles yielded by the search, 14 were eventually analyzed. 11 of them were case reports while 3 were original articles. The

review showed that patients with diabetes mellitus had significantly low scores in all four domains of quality of life (physical health, psychological health, social relations, and environment).

Conclusion: Diabetes mellitus has a negative influence on quality of life, and by extension life expectancy of its sufferers. Current research has shown that there is no significant difference in the assessment of quality of life regarding gender, age, or the level of education of the patients. Though there are 3 major ways in which diabetes negatively affects well-being, that is the development of long-term complications, development of short-term complications, and physical symptoms and lifestyle changes resulting from the demands of the diabetic regimen, the major determinant of quality of life among diabetic patients was the development of complications with the most common being arterial hypertension, neuropathy, impaired vision, elevated blood lipids and amputation of toes or feet. Future research should therefore focus on how these complications can be prevented, or detected early.

INTRODUCTION

Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces.¹ Type 2 diabetes usually develops in adulthood and is related to obesity, lack of physical activity, and unhealthy diets. Type 1 diabetes usually develops in childhood and adolescence.² The prevalence of diabetes seems to be increasing. Among the elderly population, type 2 diabetes is a growing problem, with a large proportion of newly diagnosed diabetics.³ WHO estimates that about 347 million people worldwide have diabetes and more than 80% of them are in the low and middle income countries.¹ It is projected that the number of deaths from diabetes and its related complications will double by 2030. Unfortunately, most of this burden affects the developing countries. Morbidity and mortality from diabetes is very high in Nigeria due to poor management and non-compliance with global guidelines.⁴ Diabetes mellitus, like other chronic diseases, causes severe restriction and disability in an individual's life.⁵ As a result, people with diabetes have a lower quality of life compared to people without chronic illnesses.⁶

Richard Rubin defined quality of life as a multidimensional construct incorporating an individual's subjective perception of physical, emotional, and social well-being, including both a cognitive component (satisfaction) and an emotional component (happiness).⁷ Quality of life has huge importance for people with diabetes and their doctors. Because of this, health-related quality of life (HRQoL) is now a very hot topic, not just in diabetes but also in other areas of medical research.⁸ More than fifty years ago, the WHO stated that health was defined not only as the absence of disease and infirmity, but also by the presence of physical, mental, and social well-being.⁷ This means that the focus of treatment should not just be on medical outcomes, but also on how the treatment affects the physical, emotional, and social well-being.

METHODS OF ASSESSING QUALITY OF LIFE

Several instruments are available for measuring HRQoL in diabetes, including generic and diabetic specific instruments.^{9,10} Generic instruments are designed to investigate aspects of health that are of universal importance, and allow comparisons of HRQoL among different groups of patients. By contrast, diabetes-specific instruments attempt to capture the specific impact of diabetes on patients' functioning and well-being, and could be more sensitive to small clinically important differences.¹⁰ Other less commonly used measures include the modified generic measures, disease-specific supplements, and batteries.⁹ The Medical Outcomes Study 36-Item Short-Form Health Survey (the SF-36) is a commonly used generic instrument for diabetes and it assesses six domains of functional health status: 1) physical functioning, 2) effect of physical illness on role functioning, 3) perception of general health, 4) effect of illness on social functioning, 5) discomfort because of pain, and 6) mental health.¹¹ Among specific instruments, the diabetic-specific HRQoL is often used to measure quality of life in diabetic patients. An example is the WHO quality of life questionnaire-BREF 100 which is comprised of four domains: physical health, psychological health, social relationships and the environment.⁶

LITERATURE REVIEW

Different studies have been carried out both in Nigeria and outside Nigeria with the aim of assessing the quality of life of diabetic patients and finding ways to improve it.

GLOBAL LITERATURE

Research has shown that perceived health is worse in diabetics. In a study carried out in Shanghai community in which 951 patients with

diabetes and 1007 normal subjects, all of elderly age group were evaluated, revealed that the general assessment of perceived health was worse among diabetic patients. The factors that affected their quality of life included diabetic complications, both micro and macro vascular, and their knowledge about the disease.¹² Another study in Serbia was aimed at examining the differences in the quality of life, related to health, in patients with diabetes by age, gender, and type of therapy. 90 patients from the outpatient department were evaluated, 41 men and 49 women with ages ranging between 40 to 80 years. Results revealed that these patients had lower scores in all 4 domains of quality of life. However, there was no difference in the assessment regarding gender, age, or type of therapy used. Rather, education and presence of comorbidities had the greatest impact on the quality of life.⁶

Initiation of insulin therapy and associated obesity in patients are poor prognostic factors. A study in the Netherlands sought to examine which patient characteristics are associated with quality of life and treatment satisfaction. With a sample size of 1,348 patients with type 2 diabetes, it was found that insulin therapy, obesity, and complications were associated with a lower quality of life, independent of age and sex. This led to a conclusion that obesity and the presence of complications are important determinants of health related quality of life.¹³

NIGERIAN LITERATURE

In Nigeria, financial constraints also impacts negatively on quality of life but increased social interaction and strong family ties are good prognostic factors. In a cross-sectional study of 251 patients with diabetes mellitus attending the University of Ilorin Teaching Hospital outpatient department, it was found out that poor quality of life was associated with some of the physical complications of diabetes mellitus, lower income, and lower educational status.¹⁴ In 2009, a study was carried out at the Obafemi Awolowo University Teaching Hospital, Ile-Ife in which the Well-being questionnaire (WBQ) and the WHOQoL-BREF questionnaire was administered on 53 patients attending the Diabetes/Endocrinology clinic. It revealed that characteristics such as gender, educational status, or marital status had no significant influence on the quality of life measures. The study also suggested that coping mechanisms such as the extended family system, spirituality, and overall psychosocial functioning may be higher in the Nigerian population than among Caucasians.¹⁵ A study in south-east Nigeria, observed 47 diabetic patients receiving treatment at the Federal Medical Center and General Hospital, Umuguma, both in Owerri Local Government Area of Imo state. Results showed that majority of the subjects (93.6%) lacked basic knowledge of diabetes management or care and reported inability to visit the doctor except when manifesting serious symptoms or complications. Also, all the subjects earned less than 2 dollars a day. These factors had a negative impact on their quality of life.¹

Life expectancy is lower in elderly patients. According to a study of medical records between 2003 and 2007 in the Obafemi Awolowo University Teaching Hospital in which a comparison was made between elderly patients and other age groups, it was found out that diabetic foot disease and hyperglycaemic emergencies were the main reasons for admission among the elderly with diabetic foot disease being the major cause of death. About 80.3% of the elderly group also suffered from hypertension compared to 66.9% in the younger group.³ In all the studies, there is a common acceptance of decreased quality of life and life expectancy in diabetic patients with associated comorbidities.

CONCLUSION/RECOMMENDATIONS

Good drug compliance and clinic attendance among patients should be encouraged. This will help reduce the development of complications which are the major determinants of quality of life and life expectancy among diabetics.

Greater emphasis should also be placed on blood glucose-lowering medications as hyperglycaemic emergencies are the main reasons for admission among patients. Patients should also be taught how to

monitor their blood glucose levels, and what to do if they discover persistently high or low values.

Educational and counseling interventions designed to facilitate the development of diabetic-specific coping skills should be introduced. This will help improve the quality of life of people with diabetes mellitus as it will enable them to adapt properly to living with the disease.

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