HEALTH-RELATED QUALITY OF LIFE OF DIABETIC PATIENTS

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Acknowledgement: Research supported from CNCSIS project number 1277 of Ministry of Education
Abstract

Health-related quality of life (HRQOL) provides a multidimensional perspective that encompasses a patient's physical, emotional, and social functioning. Generally, patients with more than one co-morbid condition report the poorest level of HRQOL, but some chronic conditions, like diabetes mellitus, are strongly associated with poor HRQOL.

Diabetes mellitus permanently changes a patient’s life. Measures of QOL in chronically ill patients provide an important source of medical information in addition to laboratory or diagnostic tests and are becoming increasingly relevant to controlled clinical trials.

Different instruments (questionnaires) have been developed to measure the psychological, physical, and social aspects of QOL for diabetes patients.

Rezumat

Calitatea vieţii legată de sănătate oferă o perspectivă mult mai complexă asupra unui pacient din punct de vedere fizic, emoţional, şi social. În general, pacienţii cu mai mult de o patologie asociată au o calitate a vieţii net inferioară, dar unele boli cronice, printre care şi diabetul zaharat, determină prin ele însele o reducere dramatică a calităţii vieţii legate de sănătate.

Diabetul zaharat modifică permanent viaţa celui afectat. Măsurarea calităţii vieţii la pacienţii cronici oferă date importante, alături de cele clasice, şi anume investigaţiile de laborator şi alte teste diagnostice, şi sunt din ce în ce mai discutate în trialurile clinice.

S-au dezvoltat o serie de instrumente (chestionare) de măsurare a calităţii vieţii (aspecte psihologice, fizice şi sociale) diabeticului.
Measuring quality of life in chronic diseases

The World Health Organization 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” (1) It is a broad-ranging concept affected by an individual’s physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment (1,2).

Health-related quality of life (HRQOL) provides a multidimensional perspective that encompasses a patient’s physical, emotional, and social functioning (3). Generally, patients with more than one co-morbid condition report the poorest level of HRQOL, but some chronic conditions, like cancer, cardiovascular and pulmonary diseases and, not at least, diabetes mellitus, are more strongly associated with poor HRQOL than others (4, 5, 6, 7).

Measures of QOL in chronically ill patients provide an important source of medical information in addition to laboratory or diagnostic tests (5) and are becoming increasingly relevant to controlled clinical trials (6). One goal of the measurement of QOL is to have objective evaluations of how and how much the disease influences patient’s life and how patients cope with it. These evaluations may be useful as a baseline and outcome measures and should provide framework to determine the impact of any change on patient’s QOL (7).

Chronic diseases often have a relapsing and remitting course with substantial impact on function and QOL. For chronic illnesses where there is no cure, it is important to establish that therapy really makes people feel better. Thus, survival per se is no longer perceived to be the only end point; the goal is to improve, restore, or preserve QOL. Goals of caring for patients with a chronic condition are to enhance their functional status, minimize symptoms, control pain, reduce disability, and prolong life through secondary prevention (8). Quality of life has become an accepted end point in clinical research trials in recent years, as interest in patient’s experiences and preferences has grown (9).
The impact of diabetes mellitus on health-related Quality of Life

Diabetes mellitus permanently changes a patient’s life. Patient’s self care, consisting of daily insulin injections or oral anti-diabetic agents, self monitoring of blood glucose and diabetic diet has an impact on QOL. Moreover, the acute and long-term complications which might develop will also affect a person’s HRQOL.

In a review of quality of life and diabetes, Rubin and Peyrot [11] conclude that people with diabetes have worse quality of life than do those without diabetes, specifically in the areas of physical functioning and well-being. Better glucose control generally improves quality of life, and some psychosocial factors (health-related beliefs, social support, coping style, and personality) have a powerful effect on quality of life either directly or through their capacity to buffer the negative effects of diabetes.

Diabetes complications negatively affect quality of life as do depression, aging, obesity and hypoglycemia. Women, people with a low socioeconomic status, and certain ethnic groups also report lower quality of life. Quality of life can be enhanced among people with diabetes by interventions that improve glycemic control, changes in insulin delivery systems, and educational and counseling sessions that support the development of diabetes specific coping skills [12, 13, 14, 15].

There are many reports in medical literature concerning quality of life and insulin use in diabetes patients, but two large studies specifically examined the use of insulin glargine and its effects on quality of life [16, 17]. These studies found that, whereas quality of life improved for all participants, glargine use was associated with greater improvements. Vinik and Zhang [17] compared the addition of either glargine or rosiglitazone to sulfonylurea and metformin. Although there were similar improvements in glycemia between the two groups, the glargine group reported improved quality of life. The glargine group demonstrated improved mood scores and reported fewer visual symptoms, less symptom distress, and improved scores for cognitive function, cognitive distress, and fatigue distress. Rates of edema and hypoglycemia were similar in both groups, but the glargine group had less weight gain.

Menard et al [18] examined the effects of intensive multi-therapy on quality of life among patients with poorly controlled type 2 DM compared with usual care in a randomized controlled trial. Intensive multi-therapy included monthly visits, self-
management diabetes education, and medication adjustments. Whereas the 2 groups were similar at baseline in perceived quality of life, quality of life improved significantly in the intensive multi-therapy group after 12 months. Quality-of-life scores also improved among patients who initiated insulin therapy during the trial.

Dates mentioned above reveal the negative influence of diabetes mellitus upon quality of life. Evaluation of the patient with diabetes is usually based on objective clinical outcomes and complementary examinations but patient self-assessment is increasingly recognized as important.

Assessment of quality of life in diabetes mellitus. Quality of life measurement instruments.

Different instruments have been developed to measure the psychological, physical, and social aspects of QOL for diabetes patients [19, 21, 22, 23]. These are generic and disease-specific questionnaire. Generic instruments are applicable to healthy people as well as to persons with diseases, and thereby enable comparisons to be made between various groups of patients and general population samples. Disease-specific instruments focus on a population with a specific disease and are more sensitive to treatment effects and changes over time than generic instruments [24, 25, 26]. An ideal instrument for the assessment of QOL in diabetes mellitus should incorporate the benefits of both generic and diabetes-specific instruments. It should be sensitive for changes, provide information about diabetes-specific associations with QOL, enable comparisons between various groups of patients or general population samples and make economic evaluations possible [24].

Table 1 [27] shows the most used QOL evaluation disease-specific questionnaires for diabetes mellitus in clinical trials.

Conclusions

From a clinical perspective, QOL requires a better monitoring of patients with diabetes mellitus, as it cannot be extrapolated from routine clinical variables. The treatment of non-physical aspects of chronic disease should be considered as part of the
management of diabetes. Patients with diabetes mellitus have statistically significant impairment of all aspects of QOL, not simply physical functioning. The combination of diabetes and a second chronic medical condition or diabetes complications may adversely affect the mental domains of QOL as measured by the vitality, social functioning and mental health scales.

Clinical and QOL instruments should be used together to get an appropriate overview of the health status of patients with diabetes and quality-of-life measures should be routinely employed in clinical, research, population, and policy-related situations.
References


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Table 1: the most frequently used questionnaires to evaluate QoL