

Health related quality of life measurements for diabetes: a systematic review

ABSTRACT

Health-related quality of life (HRQOL) is an essential measure that is used to assess the effect of chronic disease management on the health status of an individual. Previous studies have identified various instruments used in the measuring of diabetes-specific health-related quality of life (HRQOL). The aim of this paper is to provide a systematic review of the various instruments used for the diabetes-specific measure of HRQOL, and place emphasis on its content and measurement properties. Methods Preferred Reporting Items for Systematic Reviews and Meta analyses (PRISMA) guidelines was used. A systematic search strategy was used to identify publications reporting diabetes HRQOL measures. The search terms used were: “diabetes quality of life”, “measurements”, and “instruments”. The database that was searched includes PubMed, Science Direct, CINAHL, and Medline. Articles written in the English language and published from January 1990 to December 2020 were included. Those articles that did not measure HRQOL for diabetic patients were excluded. Results: A total of seventeen instruments met the inclusion criteria and included in the review. The appraisal of diabetes scale (ADS), Audit of Diabetes-Dependent QOL measure (ADDQOL), Diabetes Health Profile (DHP), and Problem Areas in Diabetes (PAID) are more suitable for single-scale questionnaires when investigating one or more specific aspects of diabetes-specific quality of life (QOL). The ADDQOL, ADS, Diabetes Impact Measurement Scales (DIMS), Diabetes Quality of Life Clinical Trial Questionnaire (DQLCTQ-R), Malay Version of Diabetes Quality of Life (DQOL), Iranian Diabetes Quality of Life (IRDQOL), Brief Clinical Inventory, and PAID are relevant measures of HRQOL for insulin dependent diabetes mellitus (IDDM) and non-insulin dependent diabetes mellitus (NIDDM) patients. The Asian Diabetes Quality of Life AsianDQOL, The Chinese Short Version of DQOL, Elderly Diabetes Burden Scale (EDBS), Malay Version of Diabetes Quality of Life (DQOL), are relevant measures of HRQOL for NIDDM patients. Only two instruments assess for responsiveness, namely PAID and DQLCTQ-R. In PAID, the effect sizes ranged from 0.32 to 0.65 for interventions. The DQLCTQ-R four domains were responsive to clinical change in metabolic control. Based on this review ADDQOL, DSQOLS, and EDBS psychometric properties are sufficient. Conclusion: Most studies did not check for responsiveness, and future studies should prioritize responsiveness to change, which was not included in the psychometric finding of the reviewed instruments.

Keyword: Diabetes; Quality of life; HRQOL; Instruments; Measurement