

ORAL HEALTH-RELATED QUALITY OF LIFE: A BROADER PERSPECTIVE

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Abstract: Oral health-related quality of life (OHRQoL) is a relatively new, but rapidly growing concept in dentistry. Despite the view that most dental diseases are not life threatening and do not make obvious changes in the people's life, the OHRQoL concept has been developed as an answer to the need to reflect the individual perceptions or daily limitations due to the oral problems. This paper aimed at making an inventory of the oral health-related quality of life (OHRQoL) tools, based on a review of the scientific literature. In the last two decades, many tools were developed, originally in adults, and then in children (particularly in the last decade). However, the conceptual models of health are becoming more sophisticated, and it remains to be seen if the conceptual underpinning of existing oral health status measures is now sufficiently robust, or whether new measures, based on more recent models, should be developed.

Cuvinte cheie: sănătate orală, calitatea vieții, calitatea vieții în relație cu sănătatea orală

Rezumat: Calitatea vieții în relație cu sănătatea orală este un concept nou, dar care se dezvoltă rapid. Contrar viziunii inițiale, conform căreia cele mai multe boli dentare nu sunt amenințătoare de viață și nu determină modificări evidente asupra persoanelor afectate, conceptul de calitate a vieții în relație cu sănătatea orală a luat o tot mai mare amploare, ca un răspuns la nevoia de a evidenția percepția indivizilor, sau limitările zilnice atribuibile problemelor de sănătate orală. Acest articol are ca scop să realizeze un inventar al instrumentelor de măsurare a calității vieții în relație cu sănătatea orală, pe baza revizuirii literaturii științifice. În ultimele două decenii au fost dezvoltate multe asemenea instrumente, inițial pentru adulți, dar ulterior și pentru copii (în special în ultimul deceniu). Cu toate acestea, modelele conceptuale privind sănătatea devin din ce în ce mai sofisticate și rămâne de văzut în viitor dacă actualele instrumente sunt suficient de robuste, sau dacă trebuie dezvoltate altele noi.

INTRODUCTION

Health has been defined by the World Health Organization as a "state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity".(1) It includes a range of states from wellness to illness. Therefore, no commonly global measurement for health has yet been developed. The most frequently used descriptors of health are mortality trends, life expectancy, and measurements of morbidity. The need to assess the broader aspects of health has been addressed through the development of quality of life measurements. Quality of life (QoL) is defined by the World Health Organization Quality of Life Assessment group as „individuals' 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.(2) This is a broad concept, incorporating individuals' physical and psychological state, level of independence, social relationships, relationships to salient features of the environment and their spiritual, religious and personal beliefs. Oral health is an integral part of the overall health, but most general QoL measures do not cover the specific impact of oral problems on the general quality of life, so specific tools are required for it.

PURPOSE OF THE PAPER

This paper aimed at making an inventory of the oral

health-related quality of life (OHRQoL) tools, based on a review of the scientific literature.

RESULTS

The need for specific OHRQoL approaches has been materialized when traditional epidemiologic measures failed to assess all the potential oral health outcomes. The traditional measures have limitations in measuring dysfunction, discomfort or disability. Moreover, the commonly used indicators of oral diseases, such as decayed, missing and filled teeth (DMFT), periodontal indexes, and oral soft tissue conditions, each reflect an individual aspect of oral health, but not an overall view of this. Also, they do not reflect the individual perceptions or daily limitations due to the oral problems. One view was that most dental diseases are not life threatening and do not make changes in life as obvious as the more serious diseases do. This view has been challenged by later research which has shown that oral diseases do have a significant impact on the individual and the community. Reisine (3) investigated work loss as a result of dental condition. Cushing *et al* (4) described the prevalence of eating restrictions, pain, discomfort, and aesthetic dissatisfaction caused by dental disorders. Locker and Grushka (5) reported the impact of oral and facial pain resulting in work loss, sleep disturbance, dietary habits, bed rest, staying home more than usual and reduced social contacts. So far, research has been

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done in many areas concerning OHRQoL. Some researchers work on the understanding of the concept of oral health-related quality of life.(6) Some author made comparisons between the oral health status and the generic health related quality of life measures.(7) Others work on the psychological dimensions of oral health, trying to find out its suitable determinants.(4,8) Still, others work to assign numerical values to a state of oral health-“utility values” and to measure oral health outcomes in terms of quality adjusted life years (QALYs).(9,10) In addition to these, considerable work has been done in research on instruments designed to measure OHRQoL.(10-14) This includes the conceptual basis for such instruments, development and validity testing of these measures or scales. A remarkable increase in the development and testing of OHRQoL measures, their use in health surveys, clinical trials and studies evaluating oral health service has been noted over the past two decades, especially in adults. A number of research tools focusing on subjective measures (perceptions, feelings and behaviours) were developed and modified in order to assess health, well-being and quality of life (Slade, 1997). These instruments are generally based on self-report measures, but vary in terms of length, content, sub-scale structure, response format and methods of obtaining quality of life scores. As concluded in a review by Slade et al. (1998), no single instrument can be regarded as a gold standard set of questions. Table 1 provides an overview of oral quality of life instruments used in adults, as well as studies references applying these instruments.

Table no. 1. OHRQoL instruments used in adults, their abbreviations and the number of items

Instrument	Abbreviation	No of items	Original reference
Oral health impact profile	OHIP-49	49	Slade & Spencer, (1994)
Oral health impact profile OHIP-14	OHIP-14	14	Slade, (1997a)
UK oral health related quality of life measure	OHQoL-UK	16	McGrath & Bedi, (2001)
Oral impacts on daily performances	OIDP	9 (8)	Adulyanon & Sheiham, (1997)
Geriatric (general) oral health assessment index	GOHAI	12	Atchison & Dolan, (1990)
Orthognatic quality of life questionnaire	OQoLQ	22	Cunningham et al., (2000)
Oral health impact profile (OHIP-EDENT)	OHIP-20	20	Allen & Locker, (2002)

However, children are one of the most popular populations in oral epidemiology research. Clinically, they are subject to numerous oral conditions, including caries, gingivitis, malocclusion, cleft lip and palate and craniofacial anomalies, all of which have the potential to significantly impact on their quality of life. Furthermore, oral and facial defects ranging from malocclusion to cleft lip/palate may impact on family stress, parental acceptance and psychological well being.(15,16) According to child developmental psychology, by the age of 11, children have clear understanding of complex emotions such as worry, shame, and jealousy.(17) Then comes the period of early

adolescence which is characterized by the increasing awariness of popularity with peers and others' views of self.(17,18) Many tools were developed for measuring OHRQoL in children, especially in the last decade (Table 2).

Table no. 2. OHRQoL instruments used in children, their abbreviations, the number of items

Instrument	Abbreviation	No of items	Original reference
Early childhood oral health impact scale	ECOHIS	13	Pahel et al. (2007)
Child oral health impact profile	C-OHIP age: 8-15 years	34	Broder și Wilson-Genderson (2007)
Surgical orthodontic outcome questionnaire	SOOQ	15/33	Locker et al. (2007)
Child oral health related quality of life	COHRQoL age: 8-10 years	25	Humphris et al. (2005)
Child oral impact on daily performance	C-OIDP	8	Gherunpong et al. (2004)
Parent perceptions questionnaire	P-CPQ	31	Jokovic et al. (2003)
Family impact scale (impact of child oral and orofacial conditions)	-	14	Locker et al. (2002)
Child perceptions questionnaire	CPQ ₁₁₋₁₄	37	Jokovic et al. (2002)

CONCLUSIONS

Oral health-related quality of life (OHRQoL) is a relatively new but rapidly growing concept in dentistry and it has been receiving more and more attention in the last two decades. A lot has been done for measuring it and many tools were developed, originally in adults. Focusing on children became more visible in the last decade. However, the conceptual models of health are becoming more sophisticated, and we will see whether the conceptual underpinning of existing oral health status measures is now sufficiently robust, or whether new measures, based on more recent models, should be developed.

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