

An Overview of Oral Health Related Quality of Life

Lucas Guimaraes Abreu*

Federal University of Minas Gerais, Brazil

Introduction

Quality of life (QoL) is defined as an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives and in relation to his/her goals, expectations, standards and concerns [1]. This concept has two fundamental elements: multidimensionality and subjectivity. The former refers to the coverage of a broad range of content, including physical, functional, emotional and social well-being. The latter refers to the fact that quality of life can only be understood from the patient's perspective [2]. Taking into account those elements and considering the dynamic nature of quality of life, two individuals, showing similar health status, may present different quality of life perspectives depending on their experiences, expectations and perceptions [3]. Therefore, the relation between symptoms and well-being and quality of life is neither simple nor direct. Nevertheless, the assumption of quality of life as the discrepancy between patients' expectations and experience gives an explanation on how it can be assessed. Expectations are learnt from experience. If on one hand, treatment success is likely to result in positive expectations of health services, on the other hand, unmet expectations leads to dissatisfaction and unfavourable outcomes [4].

The concept of oral health related quality of life (OHRQoL) regards how oral outcomes impact on individuals' well-being and quality of life [5]. Over the past two decades, dental research has given increasing attention to the assessment of patients' quality of life and many studies regarding this issue have been published in the dental literature providing a helpful source of information to researchers, oral health decision makers and clinicians. Oral outcomes were traditionally evaluated through clinical criteria based on the perceptions of clinicians, who were unable to determine the real impact of oral diseases and their treatments on individuals' daily routine [6]. Clinical criteria are undeniably relevant. However, the functional, emotional and social impacts of oral outcomes on individuals' lives are equally important and, therefore, should not be ignored anymore [7]. Thus, when OHRQoL measures are adopted alongside the traditional clinical methods of assessing oral health status, a more comprehensive evaluation of the effect of oral outcomes on the physical and psychosocial dimensions of people's well-being becomes possible and feasible [8].

OHRQoL Instruments

OHRQoL has been measured through quality of life instruments or questionnaires [9]. The administration of those instruments may be carried out using different strategies including direct interview, self-completion questionnaires and proxy responders, when the assessed individuals are unable to answer the questions [10]. However, the most popular method is the individual-completed questionnaire [11]. There are two main sorts of instruments that may be used. Both choices have strengths and shortcomings [10]. Generic instruments provide a summary of quality of life. These instruments allow comparison among different domains of quality of life and also comparison across populations. However, they may lack the ability to detect small changes in health status, which limits their use. Specific instruments, on the other hand, focus on issues related to single disease states or groups of patients. These instruments evaluate life quality in individuals suffering from a specific disease. They have also been used in subgroups

of people such as children. Nevertheless, they cannot be adopted to examine quality of life across populations or other disease states which constitutes a limitation [10,12]. Researchers have conducted studies to determine the responsiveness of such measures or their ability to detect changes when a patient improves his/her health status [13]. The research community has also witnessed attempts to determine what constitutes a meaningful change. A clinically important difference is an alteration considered significant by the patient and the minimum important difference is a threshold value for such a change [14].

OHRQoL and Pediatric Dentistry

For many years, OHRQoL measures have been developed to examine the impact of oral outcomes on adults' lives [15,16]. A study conducted in Brazil found a negative correlation between dental caries and quality of life of adult individuals with the main effect being upon the social, psychological and environmental subscales [17]. Similar results were found in a study carried out in India in which dental caries, among other oral conditions, had the greatest adverse impact on the quality of life of rural and urban adults [18]. The association between poor oral health and a negative impact on people's life is also an issue in developed countries such as Norway [19]. More recently, interest has centred on the development of tools for young individuals [20,21]. Several studies these tools have shown that oral disorders such as tooth agenesis [22], dental caries [23], fluorosis [24] and traumatic dental injury [25] have a negative impact on children's and adolescents' quality of life. When infants are evaluated, it is also important to assess the perceptions of parents and caregivers [26] and the impact of oral disorders on young individuals' families [27]. For instance, families of adolescents who present more severe traumatic dental injury are more likely to report an adverse effect on OHRQoL than families of adolescents who present only enamel fractures or no history of dental trauma. The main repercussions are in the parental activities and parental emotions subscales which can lead to family conflicts [28]. Malocclusion also negatively affects adolescents' quality of life. Individuals with more severe discrepancies present a more severe impact on OHRQoL when compared with their counterparts with less severe anomalies [29]. Individuals' families are also negatively impacted [30].

Researchers have also an interest in the assessment of the impact of dental treatment on individuals' quality of life. OHRQoL measures have been used to determine whether therapeutic dental interventions improve patients' lives [31]. Results of cross-sectional and longitudinal evaluations show that dental caries treatment has a positive impact

***Corresponding author:** Lucas Guimaraes Abreu, Assistant Professor, Department of Pediatric Dentistry and Orthodontics, Federal University of Minas Gerais, Brazil, Tel: +55 31 3409-5000; E-mail: lucasgabreu01@gmail.com

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on children's and adolescents' quality of life [32,33]. The impact is also positive for children's parents/caregivers [34] and their families [35]. Orthodontic treatment has also a significant effect on children's and adolescents' OHRQoL. During the first months following the placement of fixed appliances, the OHRQoL of an infant deteriorates due to a combination of pain and functional limitations [36].

However, when orthodontic therapy is completed, these individuals' quality of life is substantially improved [37]. Positive repercussions have also been observed for young individuals' parents/caregivers [38] and families [39].

OHRQoL and Practice

Knowledge obtained from OHRQoL evaluations could be thoroughly applied by health policy makers in order to justify the allocation of financial resources in the development of oral health programs. Given that oral disorders have a negative impact on individuals' quality of life, the expansion of oral health services may contribute to relieve suffering caused by oral diseases and therefore improve people's lives [7,40]. In places where oral health services have already been consolidated, quality of life assessments may be helpful in routine practice to prioritize preferences and improve communication between the individual submitted to treatment and the clinician [41].

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