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ORAL HEALTH RELATED QUALITY OF LIFE

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ABSTRACT

Data about the impacts on people´s life caused by oral condition has been gathered recently in the last decades. It is accepted and recognized by dental community that oral health status can cause considerable pain and suffering, if oral symptoms remain untreated would be a major source of diminished quality of life; disturbing people´s food choices or their speech, or may lead to sleep deprivation, depression, and multiple adverse psychosocial out comes. Influencing how people grow, enjoy life, chew, taste food and socialize, as well as their feelings of social well-being. There are so many oral conditions that impact negatively on quality of life like caries, periodontal disease, tooth loss, cancer, dental injuries, dental fluorosis, and dental anomalies, craniofacial disorders among others. In fact, not only dental disease but also treatment experience can negatively affect the oral health related quality of life. OHRQoL is a multidimensional construct that includes a subjective evaluation of the individual's oral health, functional well-being, emotional wellbeing, expectations and satisfaction with care, and sense of self. It has wide-reaching applications in survey and clinical research. OHRQoL is an integral part of general health and well-being. In fact, it is recognized by the World Health Organization(WHO) as an important segment of the Global Oral Health Program (2003). There are different approaches to measure OHRQOL; the most popular one is multiple item questionnaires. OHRQOL should be the basis for any oral health programme development. Moreover, research at the conceptual level is needed in countries where OHRQOL has not been previously assessed, including India.

KEYWORDS: Health, oral health related quality of life, oral health, quality of life.

Oral health concept

If there are complexities in defining disease, there are even more in defining health. Definitions have evolved over time. In the biomedical perspective, early definitions of health focused onthe theme of the body's ability to function; health was seen as a state of normal function that could be disrupted from time to time by disease. An example of such a definition of health is: "a state characterized by anatomic, physiologic, and psychological integrity; ability to performpersonally, in family, work, and in community roles; ability to deal with physical, biologic, psychological, and social stress". Then, in 1948, the World Health Organization (WHO) proposed a definition **Health is a state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity and Socially and economically productive life".**[1] The concept of oral health (OH) has changed over time, going from a biologist approach, in which the oral cavity contributes to protect the body from infections by chewing and swallowing, to a social and psychological approaches, that take into account other roles of the oral cavity as the contribution that it has in self-esteem, communication and interaction and facial aesthetics. There is a concept of oral health defined by Dolan, who mention that OH means "a comfortable and functional dentition which allows individuals to continue in their desired social role." Nowadays the importance of the oral cavity is recognized, as vital part of the human body. Oral Health and oral cavity should be viewed as a part of a complete body, we must see human beings and their activities and not teeth and tooth decay, thus to recognized the play that oral health has on daily life activities.[2]

Health Related Quality of Life (HRQoL)

The term "quality of life" (QoL) was first used by the British economist Arthur Cecil Pigou in 1920. The World Health Organization (WHO) in 1952 defined the concept of QoL, as "the proper and correct perception that a person has of itself in the cultural context and values on which it is embedded, in relation to its objectives, standards, hopes and concerns. It is clear and recognized that HRQoL refers to something much broader than health. One of the existing definitions consider HRQoL as "the subjective assessment of the influence of health status, health care and health promotion on an individual's ability to maintain a level of functioning that allows him to perform activities that

are important, and affect overall welfare." HRQoL is an important subjective component so it will depend on the relationship that each individual has with his life. This concept will vary and depend largely on the perception that people has about their physical, mental, social and spiritual state, largely depending on their own values, convictions and beliefs, as well as their personal cultural context and history.[1]

Oral Health Related Quality of Life (OHRQoL)

Although oral health problems are rarely a matter of life and death they remain a major public health problem because of its prevalence and there are significant indications that oral health problems have social, economic and psychological consequences, this means that they haveimpact of quality of life. Oral health-related quality of life was defined as a "self-report specifically pertaining to oral health–capturing both the functional, social and psychological impacts of oral disease".

Oral health related quality of life (OHRQOL) is a relatively new, but rapidly growing phenomenon, which has emerged over the past 2 decades. It is evident from the literature that the notion of OHRQOL appeared only in the early 1980s in contrast to the general HRQOL notion that started to emerge in the late 1960s. One explanation for the delay in the development of OHRQOL could be the poor perception of the impact of oral diseases on QOL. The concept of "OHRQOL" captures the aim of new perspective i.e., the ultimate goal of dental care mainly good oral health. According to the US Surgeon General, oral disease and conditions can "…undermine self-image and self-esteem, discourage normal social interaction, and cause other health problems and lead to chronic stress and depressionas well as incur great financial cost.

QOL is a highly individual concept. Mount and Scot linkened the assessment of it to assessing the beauty of rose: No matter how many measurements are made (Ex-color, Smell, Height, etc.) the entire beauty of the rose is never captured. QOL that are important to an individual, although systems in which patient specify at least some of the qualities are likely to come closest.[3]

Common dimensions in OHRQoL instruments are given in Fig. 1, along with specific examples of items associated with each dimension. While traditional factors like oral health symptoms are illustrated in this figure 1, factors such as social and emotional well-being incorporate positive health states such as happiness and confidence.

Figure 1: Dimensions comprising oral health-related quality of life (OHRQoL).

As HRQoL oral health related quality of life is highly subjective and has to be assessed within the framework of patients' conditions, sociocultural environments and own experiences and states of mind: because OHRQoL is related to daily life and is unique to each individual, even patients with severe conditions can report having good quality of life. Furthermore, Quality of Life is by itself multi-faceted, showing variation over time for each individual. A long the time several oral conditions have been reported in literature as conditions having impact on OHRQoL. An example is **edentulism**, condition that can affect masticatory function, dietary choice, and

nutritional level. It has been reported that wearing dentures may interfere with the ability to eat satisfactorily, talk clearly, and laugh freely.

Tooth loss is one of the worst types of damage to oral health, causing esthetic and functional problems. Some other common oral conditions, such as caries, periodontal disease, which are almostuniversal in prevalence, and which are chronic but with acute recurring episodes, also impacton QoL. Another alteration that affects quality of life is **malocclusio**n. There is an association between the presence of malocclusion with worse OHRoQL. Particularly the one related to lack of space, facial pain has adversely effects of body image, social interaction and daily behavior of the individual. Not only malocclusion but also its treatment has an effect on OHRQoL may also affect QoL through their effect on function and esthetics.

Uses of quality of life measures in clinical practice[3]

• Identifying and prioritizing problems
• Facilitating communication
• Screening for hidden problems
• Facilitating shared clinical decision making
• Monitoring changes/responses to treatment

Properties needed by measures used in clinical practice

• Validity
• Appropriateness and acceptability
• Reliability
• Responsiveness to change
• Interpretability.

Instruments to assess OHRQoL

The clinical indexes do not evaluate these aspects, they only measure the presence and severity of illness, and givescarce consideration to the functionality of the oral cavity as a whole, or to the impact of the symptoms on the patients' quality of life. So the clinical indexes that are commonly used to establish the presence and severity of pathological conditions should be complemented with indicators of social and emotional aspects related to the individual experience and subjective perception of changes in the patients' physical, mental, and social health.

OHRQoL instruments for adults

- *The Social Impacts of Dental Disease (SIDD)*
- *Geriatric Oral Health Assessment Index (GOHAI)*
- *The Dental Impact Profile (DIP)*
- *Dental impact on daily living (DIDL)*
- *Oral Health Impact Profile (OHIP)*
- *Oral Impacts on Daily Performance (OIDP)*
- *The prosthetic quality of life (PQL)*

OHRQoL instruments for children

- *Child Perception Questionnaire (CPQ11–14)*
- *Child Perceptions Questionnaire 8-10 (CPQ 8-10)*
- *Parental-Caregiver Perceptions Questionnaire — P-CPQ and Family Impact Scale — FIS*
- *Child Oral Impacts on Daily Performances*
- *The Child Oral Health Impact Profile*
- *The Early Childhood Oral Health Impact Scale (ECOHIS)*
- *Scale of Oral Health Outcomes (SOHO)*

Geriatric Oral Health Assessment Index (GOHAI)

The GOHAI is one of the most commonly used scales in assessment of OHRQoL it was developed by Kathryn Atchison and Dolan in 1990 in the USA for use with elderly populations. It is compounded by 12-items developed with three months' time reference, with five (six in the original) Likert scale options, scoring as 'often', always', 'seldom 'or 'sometimes' and 'never' reflecting the aspects that are considered to have an impact upon the quality of life of the older population as given in Table 1.[4] It was developed to evaluate threedimensions of OHRQoL including physical functions like eating, chewing, speech, swallowing psychosocial functions like worry, limitations and discomfort with social contacts, dissatisfaction with appearance; and self-consciousness about oral health, pain or discomfort including the use of medication or discomfort from the mouth. The GOHAI score is determined by summing the final score of each of the 12 items.[5]

Table 1: Geriatric Oral Health Assessment Index.

S.NO	ITEMS	RESPONSES				
		ALWAYS (1)	OFTEN (2)	SOMETIMES (3)	SELDOM (4)	NEVER (5)
1	How often did you limit the kinds or amounts of food you eat because of problems with your teeth or dentures?					
2	How often did you have trouble biting or chewing any kinds of food, such as firm meat or apples?					
3	How often were you able to swallow comfortably?					
4	How often have your teeth or dentures prevented you from speaking the way you wanted?					
5	How often were you able to eat anything without feeling discomfort?					
6	How often did you limit contacts with people because of the condition of the condition of your teeth or dentures?					

7	How often were you pleased or happy with the looks of your teeth and gums, or dentures?					
8	How often did you use medication to relieve pain or discomfort from around your mouth?					
9	How often were you worried or concerned about the problems with your teeth, gums, or dentures?					
10	How often did you feel nervous or self –conscious because of problems with your teeth, gums, or dentures?					
11	How often did you feel uncomfortable eating in front of people because of problems with your teeth or dentures?					
12	How often were your teeth or gums sensitive to hot, cold, or sweets?					

Oral Health Impact Profile (OHIP)

The OHIP, developed by Slade & Spencer is the most widely used OHRQoL questionnaire. It is based on Locker's adaptation of the World Health Organisation's classification of impairments, disabilities and handicaps (Locker, 1988). The OHIP contains 49 assessing seven dimensions of impacts of oral conditions on people's OHRQoL including functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and handicap.[6] A short version, OHIP-14, was later developed based on a subset of 2 questions for each of the 7 dimensions. It is patient-centered, gives a greater weight to psychological and behavioral outcomes, is better at detecting psychosocial impacts among individuals and groups, and better meets the main criteria for the measurement of OHRQoL. The OHIP 14 responses, "never", "hardly ever", "occasionally", "fairly often", and "very often", were codified from 0 to 4, respectively[7] as mentioned in Table 2. The scores assigned to the responses to the 14 questions are added to obtain values between 0 and 14.[8]

Table 2: Oral Health Impact Profile (OHIP).

S.NO	ITEMS	RESPONSES				
		VERY OFTEN (4)	FAIRLY OFTEN (3)	OCCAS-IONALLY (2)	HARDLY EVER (1)	NEVER (0)
1	Have you had trouble pronouncing any words because of problems with your teeth, mouth or dentures?					
2	Have you felt that your sense of taste has worsened because of problems with your teeth, mouth or dentures?					
3	Have you had painful aching in your mouth?					
4	Have you found it uncomfortable to eat any foods because of problems with your teeth, mouth or dentures?					
5	Have you been self conscious because of your teeth, mouth or dentures?					
6	Have you felt tense because of problems with your teeth, mouth or dentures?					
7	Has your diet been unsatisfactory because of problems with your teeth, mouth or dentures?					
8	Have you had to interrupt meals because of problems with your teeth, mouth or dentures?					
9	Have you found it difficult to relax because of problems with your teeth, mouth or dentures?					
10	Have you been a bit embarrassed because of problems with your teeth, mouth or dentures?					
11	Have you been a bit irritable with other people because of problems with your teeth, mouth or dentures?					
12	Have you had difficulty doing your usual jobs because of problems with your teeth, mouth or dentures?					
13	Have you felt that life in general was less satisfying because of problems with your teeth, mouth or dentures?					
14	Have you been totally unable to function because of problems with your teeth, mouth or dentures?					

CONCLUSION

The OHRQOL can provide the basis for any oral health‑care program and it has to be considered one of the important element of the Global oral health program.[8] Patient-oriented outcomes like OHRQoL will enhance our understanding of the relationship between oral health and general health and demonstrate to clinical researchers and practitioners that improving the quality of a patient's well-being goes beyond simply treating dental maladies. OHRQoL research can be used to inform public policy and help eradicate oral health disparities.

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