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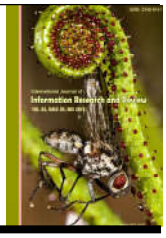

Research Article

CHILDREN AND ORAL HEALTH RELATED QUALITY OF LIFE: A REVIEW

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ABSTRACT

The present concept of health requires the inclusion of psychosocial aspects, such as issues related to quality of life (QoL), which is closely related to the human relationships in the contemporary society. The idea of "quality of life" has been expanded recently, and its improvement has also become a goal of the good practices for health promotion and prevention of disease.Oral health cannot be dissociated from general health and it is essential to quality of life. Pain and discomfort because of oral health problems are a second component of children's Oral Health Related Quality of Life (OHRQoL). Psychological factors, in particular whether children like the appearance of their teeth and how oral health affects their self-esteem, are a third aspect of children's OHRQoL.The use of indicators of OHRQoL in children is necessary since they are based on self-perception and oral health impact, which is essential for planning of actions for health promotion considering biological and psychosocial aspects. It is also suggested the need of studies using quali-quantitative methods as an alternative approach to the use of OHRQoL instruments in children.

INTRODUCTION

The World Health Organization (WHO) defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". The present concept of health requires the inclusion of psychosocial aspects, such as issues related to quality of life (QoL), which is closely related to the human relationships in the contemporary society (WHO, 1948). The term "well-being" has both objective and subjective components. The subjective component is referred to as "quality of life". "QoL was defined by WHO as: "the condition of life resulting from the combination of the effects of the complete range of factors such as those determining health, happiness (including comfort in physical environment and a satisfying occupation), education, social and intellectual attainments, freedom of action, justice and freedom of expression". Other definition of QoL is "an individual's perception of his or her position in life, in the context of the culture and valuesystems in which they live, and in relation to their goals, expectations and concerns" (Healthy people, 2010; Park, 2011). The idea of "quality of life" has been expanded recently, and its improvement has also become a goal of the good practices for health promotion and prevention of disease (Seidl, 2004).

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Oral health cannot be dissociated from general health and it is essential to quality of life (Petersen, 2003). Oral diseases such as dental caries and periodontal diseases are highly prevalent and their consequence are not only physical; they are also economic, social and psychological (Locker, 1988). Health related QOL is defined as a person's assessment of how the following types of factors affect his or her well-being: functional factors; psychological factors (concerning the person's appearance and self-esteem); social factors (such as interactions with others); and the experience of pain/discomfort (Locker, 1988; Fonseca, 2002; Cunningham and Hunt, 2001). The term "oral health-related quality of life (OHRQoL)" has no strict definition. However, there is a general agreement that it is a multidimensional concept. A simple definition is the one provided by the United States Surgeon General's report on oral health which defines OHRQOL as "a multidimensional construct that reflects (among other things) people's comfort when eating, sleeping, and engaging in social interaction; their self-esteem; and their satisfaction with respect to their oral health" (Oral health in America, 2000). The aim of the present review was to describe the oral health related quality of life in children and to improve oral health through quality of life in children.

Children and Health Related Quality of Life

Pediatric patients differ most from adult patients in at least two significance ways, first they do not necessarily self-regulate

their behaviour concerning health promotion and health care. A toddler does not make the decision to wear warm cloths when it is cold, eat a well-balanced diet and seek care for health problems. The second major difference between children and adult patients is qualitative difference between children's and adult's perception and assumptions about the world and their experiences. Despite excellence work in the 1970s that discussed the importance of assessing children's health more comprehensively (Grave, 1974; Walker and Richmond, 1984). The first measurement instrument proposed for in use in population-based studies was published in 1979 and methodological and conceptual challenges were identified and discussed in the 1980s (Eisen *et al*., 1979; Starfield *et al*., 1987). Before 1990, researchers largely focused on mortality and morbidity when they assessed children's health status and outcomes of treatment. Despite these efforts, research on children's HRQoL was struggling. Some researchers used instruments developed for adults when studying children, others globally compared the QoL of children with different problems with that of healthy children (American Medical Association, 1990; Bradyln *et al*., 1993; Stein *et al*., 1990; Starfield *et al*., 1993). This situation began to change in 1990 when the Child Health Questionnaire (CHQ) was published (Landgrf *et al*., 1999). The CHQ considers 14 dimensions of health that range from physical functioning and bodily pain to self-esteem and mental health. Most of the research in directed at measuring the QOL of children such as asthma, seizure disorders), chronic headaches, cancers and its treatment or sleep disorders (Juniper, 1997; Arunkumar *et al*., 2000; Bandell-Hoekstra *et al*., 2000; Guyatt, 1999; Barrera *et al*., 2000; Franco *et al*., 2000). A search for ongoing research projects with the National Institute of Health Computer Retrieval of Information on Scientific Projects indicates that the amount of ongoing research concerned with children's HRQoL is quite impressive.

Children and Oral Health Related Quality of Life

OHRQoL has an obvious role in clinical dentistry which translates into the clinicians' recognition that they do not treat teeth and gums, but human beings. Besides, oral-related behaviour such as practising good oral hygiene, having regular check-ups, and spending more money on aesthetic dental care are motivated by OHRQoL concerns. The notion of OHRQoL is tremendously important at all levels of dental research. Successful research, whether basic scientific research, clinical studies or community research, makes a contribution to patients' quality of life. At the community research level, the concept of OHRQoL is especially vital to promote oral health care and access to care. This approach is more useful to educate individuals about their oral health. People are more likely to behave positively when they understand how oral diseases affect their general health and quality of life rather than simply the affect of such disease on their teeth or gums. Oral health-related quality of life (OHRQoL) is an aspect of dental health addressing the patient's self-perceived perception of whether his or her current oral health status has an impact upon his or her actual quality of life (Locker, 1988; Cunningham, 2001).

Oral health problems have been increasingly recognized as important factors causing a negative impact on daily performance and quality of life because influence how people grow, enjoy life, speak, chew, taste food, and socialize (Locker, 1997). A report by the World Health Organization (WHO) acknowledged that oral diseases cause pain, suffering, psychological constraints, and social deprivation, leading to individual and society loss (Gomes and Abegg, 2007). For example, Feitosa *et al*. found that dental caries, the major public health problem affecting children, causes impaired chewing, decreased appetite, weight loss, sleep problems, behavioural changes, and low school performance (Feitosa *et al*., 2005). Additionally, poor oral health of children may compromise the family welfare because the parents feel guilty for their children's problems and have work absence and expenditures associated with dental treatment (Anderson *et al*., 2004) Hence this comprehensive review attempts to discuss how Oral Health Related Quality of Life in children affects physical, psychological and social well-being and daily activities such as eating, chewing, swallowing, speaking, playing, learning, happiness, embarrassment, and social interactions in the children (Locker, 1988; Jabbarifar and Makarem, 2004; Sheiham and Tsakos, 2007).

Caries is the single most common chronic child hood disease. Dental caries in the children is 5 times more common than hay fever and 14 times more common than chronic bronchitis .On average, it affects 28% of young children between 2 and 4 years of age,52% of children between 6 and 8 years of age, and 61% of adolescents by the age of 15 year (Sheiham and Tsakos, 2007; Evans and Kleinman, 2000; Kaste *et al*., 1999). Research shows that young children who develop caries at an early age run a high risk of further caries development in primary dentition and are likely to develop caries in permanent dentition. Research shows that rampant caries is one of the factors causing insufficient development of children who have not other problems. Early Childhood Caries (ECC) adversely affects the growth of the child's body, specially body weight and height.There are several explanations for this finding. First, the onset of dental pain and infection may alter a child's eating habits, thereby affecting body weight and height. Second, increased pain might also affect child's glucocorticoid production. Third, disturbed sleep patterns may decrease the production of growth hormones. Fourth, the overall increased metabolic rate during the course of infection may retard normal growth and development in patients with ECC (Acs *et al*., 1992; Ayhan *et al*., 1996).

Assessment of children's Oral Health Related Quality of Life in Children

Four dimensions are relevant when considering children's OHRQOL. First, functional factors such as whether children can chew and bite play an essential role. Pain and discomfort because of oral health problems are a second component of children's OHRQOL. Psychological factors, in particular whether children like the appearance of their teeth and how oral health affects their self-esteem, are a third aspect of children's OHRQOL.Social aspects such as children's oral health interfere of their school life performance.

Conclusion and Future directions

Oral and craniofacial conditions that require health care providers attention are common among children and adolescents. Dental caries is just most common problem. Cleft lip and palate is one of the most common birth defects and that many other genetic syndromes, developmental disabilities and diseases have oral health related aspects (Gorlin *et al*., 1990). It

is important to educate parents/primary care providers, dental as well as general health care providers, and teachers/child care personnel about the way poor oral health can affect a child's QOL. Parents have to realise that more than "just a baby tooth that will fall out anyway" is involved when their young child has a "toothache". They have to understand that this toothache is a health problem that can lead to future dental problems, general health problems, and problems with the child's social, academic, and adjustment in life.

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