Review Article

IMPACT OF SOCIOECONOMIC STATUS AND PARENTAL FACTORS ON CHILD ORAL HEALTH- A REVIEW OF LITERATURE

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ABSTRACT:
Oral hygiene is essential to oral health, so it is wise to provide the population with adequate guidelines on children's oral health behavior and its relationship with dental caries. Socioconomic status and attitude or demographic factors of parents have a strong influence child oral health. There is need of the time to address the factors that influence children's oral health in order to develop and implement complementary public health actions focused on children and parental behaviors, in an endeavor to provide them with good oral health and better quality of life. So, present article was aimed to review the influence of parents' oral health behaviors and socioeconomic status on their children's dental caries to elucidate what are the barriers to achieve the goal of complete oral health care.
Key words: Oral Health, Parents' dental health, Dental Caries, Parental attitudes, Parental knowledge

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INTRODUCTION:

Parents' habits and knowledge about oral health have been found to influence their children's oral health status.[1-3] Moreover, low socioeconomic status of the family and parents' poor oral health habits, have also been found to contribute to the development of dental caries. In addition, other factors such as gender and multiple levels of influence, including time or developmental dimensions, have been observed. [4-6]

Oral health-related quality of life (OHRQL) assesses the extent to which oral disorders disrupt an individual's normal function and quality of life (QL). Over recent years, the impact of oral health (OH) on QL has become an important focus for assessing the impact of a range of oral conditions on well-being, and the outcomes of treatment in improving QL.[7-8] Nowadays, researches point out the need to consider the functional and psychosocial dimensions of oral health for the implementation and evaluation of public health dentistry interventions. In order to achieve these dimensions, instruments that evaluate the oral health-related impact on quality of life (OHRQoL) have been developed, among them, the Child Perception Questionnaire to assess OHRQoL at a specific age. [7-9]

The relationship between dental health of mothers and dental caries in their children can be explained by the influence of faulty dietary and hygiene habits on infants as well as by infection of the child's mouth by maternal bacteria.[10] Dental care professionals accept that efforts aimed at improving parental oral health behaviors could result in reductions in caries risk among their children.[7] Furthermore, the evidence in the literature is nearly nonexistent in the context of quantifying the expected association between oral

health behavior of parents and oral health of their children.

Studies show that children's oral-health status is often related to social dimensions, such as parental income and education. Furthermore, childhood circumstances, as indicated by socio-economic status (SES), family structure and parenting quality, have been found to influence psychological and psychosocial attributes in children. Some factors such as maternal education, occupation, age, current knowledge, attitude, and behavior can provide insight for improving their health habits and their children's health indirectly.[12-13]

Aim of the present article is to review the pertinent literature to assess the relationships between clinical, psychological, social, and demographic variables with respect to Oral Health.

SOCIO-ECONOMIC STATUS (SES): The association between children's poor oral health and low socio-economic status of the family is clear. According to Mattila et al., the mainly factors correlated with children's caries index (DMFT) at the age of 5 years are: mother's young age, parents' cohabitation, rural dwelling, parents' poor caries history, mother's poor dental hygiene habits, child's sugar consumption before the age of 18 months, and child's headache at the age of 5 years.[14] The fact that mothers of children in ethnic minority groups often receive only a few years of education results in poor communication skills, and consequently poor dental health.[15] In addition, sociodemographic characteristics affect oral health knowledge and attitudes of parents with a lower level of education, and negatively affect their oral health practices. A higher prevalence of dental caries and lower toothbrushing frequency was found in 3-year-old children living in rural areas, when compared with those from urban settings.[16]

Many studies have determined the SES by 5 questions (paternal and maternal education, paternal and maternal occupation, and family income), and the SES was divided according to those questions into 3

levels (high, moderate, and low).[17] Regarding the OHRQoL measure, Eckstein et al[18] have found after performing a literature review that there are 2 OHRQoL measures, first of them is: Child Oral Health Impact Profile (COHIP); and the second is Child Oral Health Quality of Life (COHRQoL). Oral Symptoms domain showed significant differences between the 3 levels of SES, and the gingival bleeding happened in less frequencies in cleft children belonging to the high SES level that can be explained by the increase of gingival problems when the SES reduction, this finding regarding gingival lesions is in agreement with Rasool et al[19] in Pakistan. Sayegh et al[20] has reported clear association between social class and gingivitis. Food caught between\in teeth was observed in high proportion in both high and low SES levels in comparing with moderate level, and it could be related to untreated dental caries, which may increase with a decrease of SES.

INFLUENCE OF PARENTS ON CHILD ORAL HEALTH

Since parents are the primary social force influencing child development in the early childhood years, it seems that interventions targeting parental oral health beliefs and practices may be beneficial in the prevention of oral health problems such as dental caries. Several factors, such as neglecting oral health by parents and their inability to pay for health services and genetic factors, might interpret this relationship. Parental history of dental problems may show their consideration to oral health behaviors. A lot of factors may cause poor oral health status of parents and these factors may cause poor dental health (high dmft) in children.

PARENT'S EDUCATION: The relationship between plaque index of children with mother's education and history of dental problems in parents was significant. This means that the presence of dental problems in parents may follow by some problems such as poor hygiene (high-plaque index) in their children. It can also show that high dental problems in parents may affect their consideration to hygienic behaviors of their children; so, healthy parents are more likely to have children with lower plaque index than unhealthy parents. It can interpreted that education of mothers can increase their knowledge about health behavior followed by increasing their ability to supervise hygienic practices of their children. Parents with higher education have more positive attitudes and stronger intentions to control children's health behavior than low-educated parents.[21] In a study by Abiola Adeniyi et al.[22], a significant relationship was reported between mothers' educational level and the oral hygiene status of their children

PARENT'S EDUCATION:

Several studies have analysed the effect of a parent's occupation on children's OHRQoL and variable results have been obtained. Either father, mother or both have profound effect on child's oral health status. Preschool children whose household heads were unskilled or economically inactive had a higher likelihood of having high-level oral impacts than those whose household heads had skilled occupations [23], while studies from France [24] and Greece[25] reported the parent's professional activity and parental occupation, respectively, to be insignificant. In a study that assessed the effect of parents' work activity found fathers' work activity away from home to be insignificant while mothers' work activity was significantly related to total child's oral health status.[26]

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PARENTAL ORAL HEALTH LITERACY, BEHAVIOUR AND DENTAL ANXIETY:

Frequency of tooth brushing in parents is significantly in relationship with frequency of tooth brushing in their children. Tooth brushing skills and appropriateness of oral hygiene in parents can affect the frequency and quality of tooth brushing in children, because children learn many of behaviors from their parents; so, it is predictable that they follow their parents' behavior for tooth brushing.[10] A study by Vanagas et al. has reported that oral hygiene skills and attitudes of parents toward children oral health are significantly associated with the development of oral hygiene skills including tooth brushing in their children.[27] One study by Dye et al. in 2011 showed a direct association between tooth brushing habits of the mother and her child.[28] Parental frequency consumption of sweet foods between meals had a significant relationshipwith this behavior in their children. Some studies revealed a parental and child's eating behavioral relationship.[29] The results from a study by Brown and Ogden (2004) indicated that parents own eating behavior is the most important source of information for their children eating behavior.[30]

Based on several studies, the key elements that showed particular impact on children's oral health behavior and oral health status were: parents' oral health-related attitudes, general knowledge, and health status.1-3 When all these key elements were compared, parents' behaviors appeared to be more strongly related to children's behavior than are parents' knowledge and attitudes, supporting the findings that children learn behaviors from their parents.[24] Mothers' oral health-related knowledge has been associated with dental caries in 3-year-old children.[25] Although parental factors are known to influence children's dental health, there are differences between study models for boys and girls. Boys were influenced by their father's occupational level, while girls were influenced by their father's knowledge and behavior. Taking these findings into consideration, school health educational interventions involving the entire family are needed to provide children with more adequate preventive guidelines in order to ensure the success of their oral health.[26]

PARENTS' TOOTHBRUSHING HABITS AND CHILDREN'S TOOTHBRUSHING-RELATED BEHAVIOR

Parents' toothbrushing habits were found to influence their children's toothbrushing behaviors. This hypothesis was confirmed by an international study involving 17 countries. Considering that regular toothbrushing and flossing eliminate cariogenic bacteria and fermentable substances from the tooth surfaces, good oral hygiene habits help prevent some oral pathologies, such as periodontal diseases and dental caries, which are considered common public health problems. At different ages in childhood, toothbrushing habits should be introduced to children by their parents or care-givers, and practiced on a daily basis.[20] Therefore, an educational approach targeting both children and their parents would help them to suffer fewer carious lesions, and to have better oral health and quality of life.[16-20]

Parents' oral health behaviors have a direct influence on the number of decayed teeth of their children, indicating that oral health strategies should be focused not only on children but also on their parents.[12] Children of parents who control their children's toothbrushing and sugar intake have favorable oral health habits, demonstrating that parental attitudes have a positive impact on their children's oral health status.

Interestingly, parental self-efficacy is associated with insecurity about correct toothbrushing techniques, but mostly, to a self-reported oversensitivity to the child's desires for some particular foods or not liking to brush.[4]

Recommendations on children's oral health care

A better understanding of social, economic, belief, behavioral, and attitudinal factors is imperative to

achieve goal of oral health promotion. A wider outlook involving multiple determinants of oral health53 is needed to encourage individuals from different backgrounds to adopt a healthy lifestyle.54 The idea behind motivating both the individual and community must be understood. Individuals at the highest risk of caries with the lowest motivation are the most difficult patients to work with during the practice of oral health education.67

Nevertheless, changing people's behavior and getting them to maintain it is a great challenge to health professionals. Poor parental oral health behaviors are likely to be caries predictors for their children.35 Therefore, all aspects associated with the family's process of acquiring and maintaining good oral health behaviors are aspects with an impact on pediatric dental health care. According to Kay & Locker, health education is helpful in raising the level of knowledge, and in changing both attitudes and beliefs.58 Health promotion programs provide not only schoolchildren, but also their parents, with adequate information on dental care involving oral health habits and attitudes. The entire family should take responsibility for their dental hygiene.[17]

The American Academy of Pediatric Dentistry (AAPD) recommends that all children begin routine dental care starting at age 1, or when the first tooth emerges. Early dental care allows for prompt detection of tooth decay and application of sealants, fluoride varnish, and other preventive treatments; and early dental visits allow providers to offer guidance for parents on how to properly care for baby teeth.[31]

Socioeconomic disparities account for part of the oral health behaviors involving the whole family. Oral health policies designed to change behaviors are unlikely to completely eliminate disparities in oral health.

CONCLUSION:

Children from low-income families are less likely to receive comprehensive dental care and are more likely to have acute dental disease than children from middle- and upper-income families. Parents have strong influence on the child oral health. We emphasize on the need of Community-based initiatives, including school-based programs to developing trust with providers and encouraging and supporting caregiver-controlled care.

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