



## Barriers in Achieving Oral Health Care among Children with Low Socioeconomic Status: A Cross-sectional Study

Authors

**Dr Ganga Dubey<sup>1</sup>, Dr Divya S Sharma<sup>2</sup>**

<sup>1</sup>Senior Lecturer, Dept. of Pedodontics and Preventive Dentistry, Sri Aurobindo College of Dentistry

<sup>2</sup>Professor and HOD, Department of Pedodontics and Preventive Dentistry, Modern Dental College and Research Center

### Abstract

**Introduction:** Dental diseases poses a serious public health problem in children and thus children often remain deprived from oral health care due to various barriers like low socioeconomic status, parental ignorance, ill-literacy etc. which hinder them to receive optimum dental services. The Purpose of the present study is to determine these barriers which may help to provide comprehensive dental care to these children.

**Aim:** To find out the barriers of not attending dental clinics by the parents/caregivers of children belonging to low socioeconomic status.

**Methods:** For this study a structured validated, reliable and pre-tested close-ended questionnaire was employed to collect the data from the 200 parents belonging to the lower socioeconomic status in area of Gandhi Nagar, Indore. An informed consent was taken from participants. Interview method in their preferred language was used to collect the data. The questionnaire consisted of Socio-demographic information (viz name, age, gender, education, occupation of parents/caregivers), Knowledge and attitude regarding their oral health care, Perception regarding importance of visiting dental institute and reasons for non-utilization of oral health care services which included the various barriers. For Statistical analysis Chi-square test, Pearson's correlation test and Internal consistency by using Cronbach alpha coefficient was used and  $p$ -value  $\leq 0.05$  was considered significant.

**Results:** Mean Age of study subjects was  $25.65 \pm 1.94$  yrs. There was equal distribution of males and females among subjects. Majority of them were illiterate and daily wage workers. Reliability analysis showing internal consistency was adequate: Cronbach's alpha coefficient was 0.82, (recommended  $>0.70$ ). Commonest reason for non utilization of dental services was lack of time followed by financial constraints and distance from dental clinics. There was a significant positive correlation observed between utilization of oral health care services by the parents /caregivers and utilization of oral health care services for their children ( $r=0.443$ ;  $p$  value  $<0.001$ ).

**Conclusions:** Parents have strong influence on the child oral health and there is the need of Community-based initiatives, including school-based programs to developing trust with providers and encouraging and supporting caregiver-controlled care.

## Introduction

According to a 2012 World Health Organization fact sheet on oral health, "Oral health is essential to general health and quality of life."<sup>1</sup> It is a critical but an overlooked component of overall health and well-being among children and adults. Dental disease is a serious public health problem in children and has a universal distribution throughout, despite this only a few access dental care. "Access" is a term used for a broad set of concerns that centre on the degree to which individuals and groups are able to obtain needed services from the health care system.<sup>2</sup> The extent to which a population "gains access" to health care depends upon financial, organizational, and social or cultural barriers that may limit utilization. Children from some racial/ethnic minorities, large families, and caregivers who have low educational attainment are most at risk for suboptimal dental care.<sup>3</sup> Those children often remain deprived from oral health care due to various barriers which in turn hinder them to receive optimum dental services.

Barriers to seeking dental services have been classified by the Federation Dentaire Internationale as related to: (a) individuals themselves (such as lack of perceived need, anxiety or fear, financial considerations and lack of access), (b) the dental profession (inappropriate manpower resources, uneven geographical distribution, training in-appropriate to changing needs and demands and insufficient sensitivity to patient's attitudes and needs), and (c) society (insufficient public support of attitudes conducive to health, inadequate oral health care facilities, inadequate oral health manpower planning and insufficient support for research.<sup>4</sup>

Subgroups of our population who have problem with accessing care are the poor and the working poor, poor inner city residents, rural area residents, mobility restricted people, culturally isolated groups, unemployed and uninsured and people with special needs. Children represent a dependent population. Especially those in rural with low socioeconomic status (SES) are pushed

toward high unmet dental needs.<sup>5</sup> few studies have actually asked caregivers why are they not able to take their children for dental treatment.<sup>6,7</sup> Understanding factors that hinder utilization of dental care is necessary to develop policies that adequately address these issues. In this direction, such surveys serve as an important tool for oral health policy decision-making and understanding oral health-related behavior. The aim of this study is to determine the barriers related to utilization of oral health care by the parents/caregivers of low socioeconomic status for themselves and for their children. This study also compared barriers related to the utilization of oral health care of their children and parents.

## Method

A cross sectional study based on a questionnaire was conducted among parents/caregivers of children in a rural population in Gandhi Nagar Indore for a period of 1 month -September 2016. Ethical clearance was obtained from the Institutional Ethics Committee. 200 Parents/caregivers belonging to low socioeconomic status and who provided with the informed consent prior to start of the study participated in the study.

The items in the questionnaire were developed by the investigator, in part through items from previous literature search, and pilot tested on a small group of graduate students and administrative staff to ensure item clarity and reliability. Internal consistency was tested to be adequate. Questionnaire was translated in the regional language i.e. was translated in Hindi language according to their ease of understanding. Therefore a Structured Validated, Reliable and Pre-tested close-ended questionnaire was employed to collect the data from the parents/caregivers. The items in this questionnaire consisted of: Socio-demographic information (name, age, gender, education, occupation of parents/caregivers), knowledge and attitude regarding their oral health care, perception regarding importance of visiting dental institute and the reasons for not having access to utilization

of oral health care services which included the various barriers. To assess perceived barriers to receiving regular dental care, participants were also asked about their perceptions of the importance of dental care as well as the effects of cost, fear, location, and time on dental attendance. Interview method was used to collect the data. Data were collected using a structured proforma that consisted of two parts: The first part contained socio demographic information and in the second part, information regarding the perceived oral health status, knowledge, attitude and practices, barriers for a dentist, and utilization of dental health services among parents was collected using a validated 14-item questionnaire. After obtaining this information data were systematically compiled, and the results were expressed in percentages and been subjected to statistical analysis.

#### Statistical Analysis

Statistical analysis was done using SPSS Software (version 20.0). Data was analyzed using –Chi-

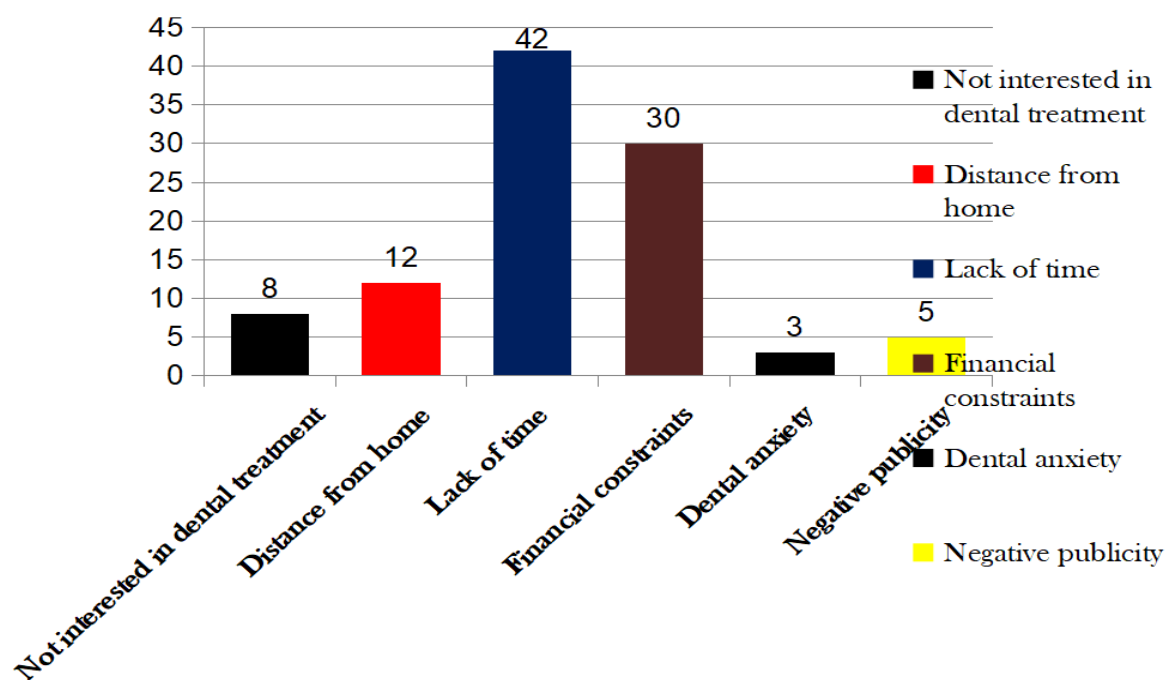
square test, Pearson’s correlation test. Internal consistency was determined by using Cronbach’s alpha coefficient. p value  $\leq 0.05$  was considered significant.

#### Results

Mean Age of study subjects was found to be  $25.65 \pm 1.94$  and there was an equal distribution of males and females in the study subjects. Majority of them were illiterate and worked on daily wages basis as workers in construction site. Reliability analysis showing internal consistency was adequate: Cronbach’s alpha coefficient was 0.82, (above the recommended.70 threshold).

Among Barriers for not utilizing oral health care services by parents/caregivers six main barriers came into notice in which highest is Lack of time (42%), followed by financial constraints (30%). Distance from home was also one of the significant barrier (12%). Few parents/caregivers responded to not interested in dental treatment (8%), negative publicity (5%) and dental anxiety (3%) (Figure 1)

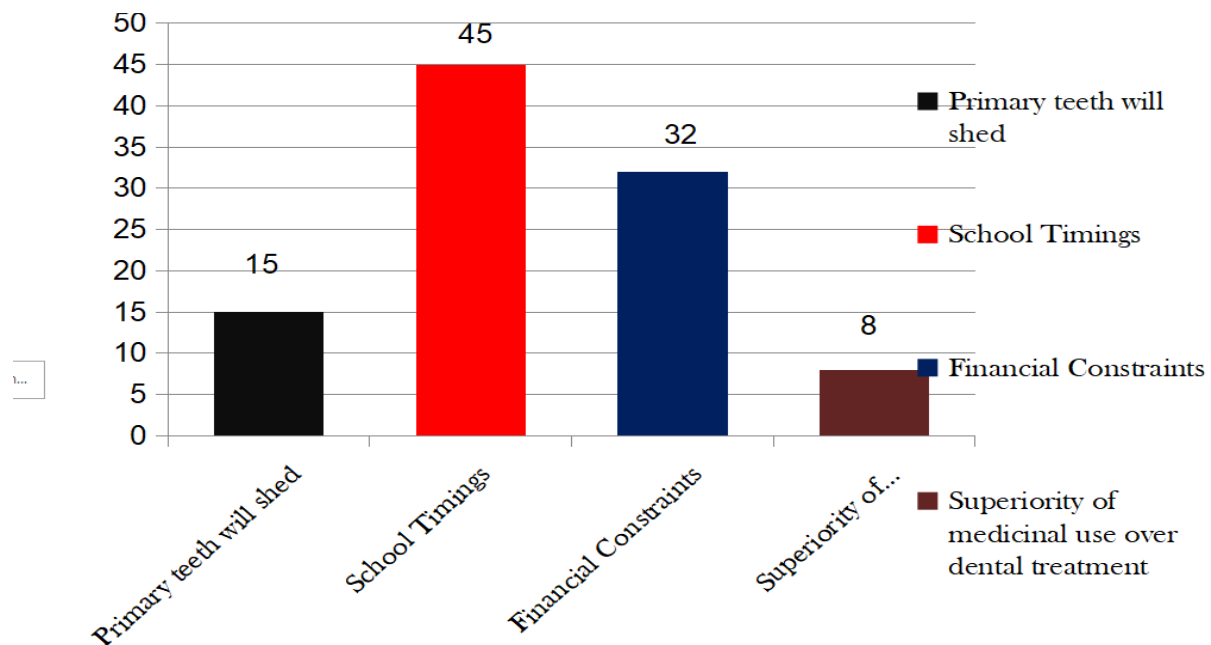
**Figure 1-Reasons for not utilizing oral health care services by parents/caregivers**



Among Barriers for not utilizing oral health care services for their children by parents/caregivers four reasons came into picture, school timings was the highest rated barrier (45%), followed by

financial Constraints (32%). Also Primary teeth will shed was rated by (15%)of the parents and superiority of medicinal use over dental treatment was (8%) parents/caregivers. (Figure 2)

**Figure 2-Reasons for not utilizing oral health care services for their children by parents/caregivers**



There was a significant positive correlation observed between: Utilization of oral health care services by the parents /caregivers and utilization of oral health care services for their children ( $r=0.443$ ;  $p$  value $<0.001$ )

### Discussion

As stated by Indian society of Pedodontics and Preventive Dentistry (ISPPD), “Every Child has a Fundamental right to Oral Health”. Our duty is to provide optimal oral health care to each and every child irrespective of his/her socioeconomic status. The goal of this study was to identify mainly the barriers related to utilization of oral health care by the parents/caregivers of low socioeconomic status.

Singh et al<sup>8</sup> identified several barriers to oral healthcare in India as: (i) a lack of acknowledgement of the importance of oral health among the population, which perceives it as independent from and secondary to general health;

(ii) no access for many to an oral health provider due to geographic distance; (iii) dental treatment is unaffordable for many; and (iv) quality of dental treatment is varied.<sup>8</sup> These factors, in turn, may vary across geographic locations and demographic groups. Oral health perceptions provide additional information that will improve our understanding of some of the motivating factors influencing individuals’ decisions to seek dental care. Parents’ habits and knowledge about oral health have been found to influence their children’s oral health status.<sup>9,10</sup>

In this study the main reason for not utilizing oral health care by the caregivers themselves was lack of time, followed by financial constraints. Most of the caregivers were daily wages worker so they were not able to give time for the lengthy dental procedures and scheduled appointments. The distance from their place to the dental care setting also contributed as longer distances take longer time to reach plus there are conveyance problem

too. Lack of time was also reported as a barrier for not visiting a dentist in this study Shammeri AL<sup>11</sup> and Poudyal S<sup>12</sup>. A study by Padmini C<sup>13</sup> proved a statistically significant relationship between the prevalence of dental caries and convenient timing hours for treatment with the  $p < 0.001$  and lack of time is one the prime reason in accessing dental health care facilities.

Financial constraints came out to be the second prominent barrier in utilization of dental health services by the parents/caregivers. The reason being their low income, large families, single earning members and perception that dental disease is not life threatening and there are other important things to spend money on. According to Milgrom et al 1998, there is a clear socioeconomic disparity in the distribution of oral health problems, with children in the low-income group are almost twice as likely as children in the high-income group to have unmet dental needs and the reason for the persistent problems is not only due to inadequate access to dental care but also for preventive services.<sup>13</sup> Number of studies conducted by various authors in India proved the relationship between socio economic status and prevalence of dental caries.<sup>14,15</sup>

Other than these reasons other reasons were lack of interest in dental treatment, negative publicity and dental anxiety which are common for rural population as most of them are uneducated and even today they believe in home remedies and also the so formed taboos related to dental treatments.

Oral health perceptions provide additional information that will improve our understanding of some of the motivating factors influencing individuals' decisions to seek dental care.<sup>16,17</sup> Parents' habits and knowledge about oral health have been found to influence their children's oral health status.<sup>18,19</sup> This study also found a positive relationship between utilization of oral health care services by the parents /caregivers and utilization of oral health care services for their children.

On evaluating the parent's views over their children's dental treatment we found similar

results. The main source of dental service in rural population are the dental institute which provide economic treatment to their children as they are not able to afford private treatment charges. However the timings of these institutes mostly clashes with their school timings. So it is important to develop some policies which may solve this problem.

The main barriers for not attending dental college for children were found to be there school timings followed financial constraints. Perception of parents that primary teeth would shed was also a barrier for few of the parents but majority of them were really concerned about their children's oral health. Clearly if being told about the importance of primary dentition and the effects of oral health on general health parents would react positively towards dental treatment.

Few of the parents/caregivers also relied on the use of medicine over the dental treatment as pain relief was the only concern for them. This is because of the fact that there is still a lack of awareness among parents/givers about the importance of dental treatment.

This study insists us to focus on this particular group of population which require an immediate attention. Although the present study has a limitation of being a cross-sectional study and focused on a very small group of population. More studies and qualitative researches are required for proper policy generation. Hence, further studies should be conducted at district level representing various strata of the society.

### Conclusion

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

**Recommendations**

- School-based programs should be developed to encourage and support caregiver-controlled care.
- Treatment camps should be conducted near the vicinity of the people for proper utilization of dental treatment
- Community based programs should be developed to create awareness about oral diseases among parents, children.
- Dental treatment to the children in the school premises should be provided by using frontline workers in the healthcare system.
- Information regarding oral health should be included on a wider basis in the school curriculum in an attempt to prevent and control dental diseases.

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