Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies ***NLM ID:*** *101716117*

Journal home page: www.jamdsr.com doi: 10.21276/jamdsr Indian Citation Index (ICI) Index Copernicus value = 100

(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

Original Research

Knowledge, attitude and practice of parents regarding the oral health of their children in Barwala region of district Panchkula

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ABSTRACT:
Background and aim: Parent's knowledge and attitude towards oral hygiene practices plays an important role in maintenance of young children's oral health. It is evident that more a positive is the parent's attitude towards oral health; the more well will be the oral health of the children. Thus the main aim of the study was to assess knowledge, attitude practice of parents regarding oral health of their children. **Material and methodology:** 1000 randomized subjects visiting the department of pediatrics with either of their parents aged 3-5 years were selected. Data collection was done using a self-administered questionnaire about socio-economic status and knowledge attitude and practice of parents toward oral health. **Results:** the answers of the questions asked were aggregated and analyzed statistically using frequencies and percentages while the correlation was evaluated using pearson correlation test. The results evaluated that the awareness among parents regarding oral health was low in economically weaker sections and their attitude towards any sort of dental treatment differed significantly from socio-economically higher section who knew the importance of regular dental visits. **Conclusion:** The results of the study evaluated that majority of the parents had relatively low awareness of oral hygiene and in-turn its implementation towards the change in attitude of parents is the need of the hour.
Keywords: Awareness, oral health, knowledge, parents, socio-economic status.

Received: 18 December, 2022 Accepted: 22 January, 2023

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This article may be cited as: Wani NI, Kour N, Sehar K, Zia A, Hela HA, Hameed U. Knowledge, attitude and practice of parents regarding the oral health of their children in barwala region of district panchkula. J Adv Med Dent Scie Res 2023;11(2):33-38.

INTRODUCTION

Oral health is an essential feature of general wellbeing in infants and children and it has a huge bearing on the quality of life and health consequences.[1] A healthy mouth usually works with proper mastication, speech and socializes without experiencing any pain or any major public health problem.[2]Oral diseases represents a major epidemiological problem. Infant oral health services is the main foundation on which life time preventive education and dental care can be develop and consequently the preventive processes should be started early in infancy during the principal year of life to guarantee ideal outcome for the same.[3]

The main adverse consequence to kid oral wellbeing is early childhood caries which might compromise the growth and development of impacted children, as it may develop related problems, for example, dental pains,local infections and subsequent tooth loss which could lead to difficulty in eating and sleeping, psychosocial issues and the increased possibility of caries in permanent dentition as well.[1,4] Number of infants and little youngsters all over the world in emerging nations as well as in developed countries are as yet confronting this serious health problem.[4]

Caries is preventable disease and primary guardians plays a critical part in forestalling dental caries in small kids, particularly during the initial three years of preschool period.[5] This is on the grounds that guardians generally are the essential leaders on issues influencing their kid's health.[4] These early years include "primary socialization", during which the earliest childhood schedules and habits are acquired.[6]

Keeping into thought the vital job of guardians in displaying their children towards practicing preventive oral health measures over the course of life, the oral health schooling of parents thus becomes essential part.[7]The patterns of behavior learnt during this stage are profoundly imbued and are impervious to change, endeavors to change the way of behaving at a later progressive phase might be difficult.[8]

Among a wide range of ways to deal with the counteraction of dental infections, the most practical strategy is health education. Instructive and persuasive projects in oral health have been carried out so that the vast majority of the population can approach access to information related to problems in the oral cavity and guidelines for oral hygiene, as well as inspiration to focus on oral health.[9] Persuasive meeting for example parental guiding by essential medical services providers plays an important part in decreasing the prevalence of early childhood caries.[10]

There is inadequate data fair and square of information, mentality and practice by guardians. To accomplish these objectives, one needs to survey about the current degrees of information, disposition, and practices of parents and identifying the weak spots with the goal that preventive methodologies can be formulated.[11]Thus the main aim of our study was to evaluate the knowledge attitude and practice of parents regarding the oral health of their children in barwala region of district Panchkula, Haryana.

MATERIAL AND METHODOLOGY

The proposed study was conducted in the Department of Paedodontics and Preventive Dentistry at B.R.S. Institute of Dental Sciences and General Hospital, Village Sultanpur, Panchkula, Haryana after being approved by the institute's ethical committee. Simple random sampling technique was used to select 1000 parents (either of the two) accompanying their children aged 3-5 years, to Department of Paedodontics and Preventive Dentistry. A short summary about the need and time period of the study was discussed with the parents and whosoever willing to participate were included in the study. Systematically healthy children were mostly included. Children with age above 6 years, parents not willing for the participation and caregivers or guardians accompanying the children were excluded from the study.Before the beginning of the study, parents were asked to sign a statement of informed consent in Hindi or English according to their preferences.

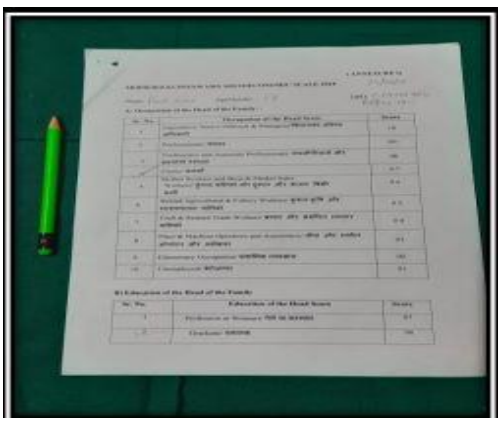
PROCEDURE

1. SOCIO-ECONOMIC STATUS

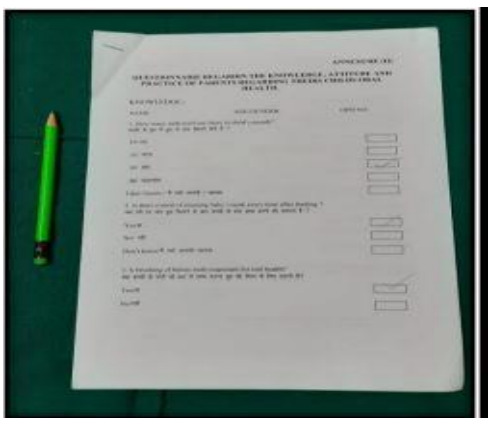
The parents were then invited to have a face to face interview and answer the questionnaire (form 1) regarding their family's socio-demographic details which were also available in two languages. The questionnaire included questions related to the demographic details, occupation of the head of family, education and family income. Based on the above variables socioeconomic status was determined by the usage of modified Kuppuswamy scale 2018.[12]

2. KNOWLEDGE, ATTITUDE AND PRACTICE QUESTIONNAIRE

A self-structured questionnaire was used to gather the information regarding knowledge, attitude and practices of parents related to the oral health of their children. A total of 27 questions regarding the same were used for this purpose. The questionnaire contained 10 questions related to knowledge, 6 questions related to attitude, and 11 questions related to practice of parents. This questionnaire was also made in two languages (English / Hindi) (Form 2). This questionnaire was also administered by face to face interview method in the language most suitable to the respondents**.** After the completion of interview the questionnaire was collected back. To assess the final responses for the questionnaire, a scoring system was developed; scores were based on the number of correct/favorable answers given by parents i.e. (Knowledge – >7: good, 4–6: fair, <3: poor, Attitude – good: >5, fair: 3–4, poor: <2, Practices – good: >7, fair: 4-6, poor: <3).[13, 14]



FORM 1



FORM 2

SAMPLE SIZE ESTIMATION

Assuming 5% significance level, margin of error (e) as 3% and proportion (p) of the subjects who had knowledge about oral health as 20% (0.20), sample was calculated to be 683. Sample was calculated using the following formula's= $(z^2p\ (1\text{-}p))/e^2$ and in order to increase the power of the study, we included 1000 subjects in our study.

STATISTICAL ANALYSIS

The validity of questionnaire was checked through Chronbach alpha method. The data obtained after interviewing the parents were collected and arranged in microsoft excel sheet and analyzed using SPSS software version 20.0. Continuous variables were expressed as mean± SD and categorical variables were summarized as frequencies and percentages. Graphically the data was presented as bar diagrams. Pearson correlation was employed to determine the correlation between knowledge attitude and practice of the parents with their socio-economic status. All P-values were 2 tailed with a p- value of less than 0.05 was considered to be statistically significant.

RESULTS

1000 children aged 3- 5 years along with their parents (either of the two) took part in the study, out of which 429 (42.9%) were boys and 571 (57.1%) were girls (Table: 1).

Table 1: Distribution of children according to gender

Gender	Frequency (n)	Percentage (%)
Boys	429	42.9
Girls	571	57.1
Total	1000	100

The mean age group was 2.412 ± 0.66years with maximum children i.e. 497 (49.7%) were of 5 years followed by 405 (40.5%) of 4 years, and 98 (9.8%) of 3 years (Table: 2).

Table 2: distribution of school children according to age

Age	Frequency (n)	Percentage (%)
3	98	9.8
4	405	40.5
5	497	49.7
TOTAL	1000	100

Based on the scoring criteria, it was found that 258 (25.8%) parents exhibited poor knowledge, 320 (32.0%) showed poor attitude and 411(41.1%) showed poor practices. Whereas around 520(52.0%) showed fair knowledge, 474(47.4%) exhibited fair attitude and 416(41.6%) showed fair practices. In this study fewer participants were in good category. Merely 222 (22.2%), 206 (20.6%), 173 (17.3%) parents were in good category of knowledge, attitude and practice respectively (Table: 3)

Table 3. Distribution of overall knowledge, attitude and practice of parents

Variable	Good		Fair		Poor	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Knowledge	222	22.2	520	52.0	258	25.8
Attitude	206	20.6	474	47.4	320	32.0
Practice	173	17.3	416	41.6	411	41.1

Strongly positive correlation was found between knowledge attitude and practices of parents with respect to their socioeconomic status. Parents belonging to the upper middle class had good knowledge attitude and practices (6.7847, 4.5428, and 6.3481), parents belonging to lower middle class had mostly fair knowledge attitude and practices (4.7815, 3.2583, and 4.0563) and the parents who belonged to the lower class, and majority had poor knowledge attitude and practices (0.70711, 0.70711 and .000). The P value for this correlation is statistically significant (0.000) (Table 4 A and B).

Table 4 a: depicting the co-relation between socioeconomic status and knowledge attitude and practices of parents

Status	Stats	K score	A score	P score
Upper middle	Mean	6.7847	4.5428	6.3481
	N	339	339	339
	Std. Deviation	1.22267	1.06883	1.47657
Lower middle	Mean	4.7815	3.2583	4.0562
	N	302	302	302
	Std. Deviation	0.93221	0.80665	1.07221
Upper lower	Mean	2.9412	1.8571	2.3025
	N	357	357	357

	Std. Deviation	1.21757	0.87364	1.06703
Lower	Mean	2.5000	1.5000	3.000
	N	2	2	2
	Std. Deviation	0.70711	0.70711	0.0000
Total	Mean	4.7990	3.1900	4.2050
	N	1000	1000	1000
	Std. Deviation	1.96939	1.45534	2.08598

Table 4b: depicting the co-relation between socioeconomic status and knowledge attitude and practices of parents

	Stats	Status	Knowledge	Attitude	Practice
Status	Pearson corelation	1	0.784*	0.786*	0.835*
	Sign (2-tailed)		0.000	0.000	0.000
	N	1000	1000	1000	1000
Knowledge	Pearson corelation	0.784*	1	0.857*	0.827*
	Sig. (2-tailed)	0.000		0.000	0.000
	N	1000	1000	1000	1000
Attitude	Pearson corelation	0.786*	0.857*	1	0.838*
	Sign (2-tailed)	0.000	0.000		0.000
	N	1000	1000	1000	1000
Practice	Pearson corelation	0.835*	0.827*	0.838*	1
	Sign (2-tailed)	0.000	0.000	0.000	
	N	1000	1000	1000	1000

*Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

As parents are the primary caregivers for their children, they should have sufficient knowledge, attitudes, and practices regarding the oral health of their children in order to instill a positive attitude and good oral hygiene habits. As oral health-related habits are established during infancy and maintained throughout early childhood, parental knowledge has a direct impact on the child's oral hygiene practices.[13]The primary responsibility of the paediatric dentist is to provide knowledge in the form of anticipatory guidance, which in turn will prevent further invasive restorative procedures.As parents are the essential guiding figures of their kids they ought to have sufficient information, mentality and works on in regards to the oral wellbeing of their youngsters to teach uplifting outlook and great oral cleanliness propensities.[15]

Based on the scoring rules as portrayed by Jain et al (2014)[13] and Arangkulavan, et al (2015)[16] it was seen that as 258 (25.8%) parents displayed poor knowledge, 320 (32.0%) showed poor attitude and 411(41.1%) showed poor practices. While around 520(52.0%) showed fair knowledge, 474(47.4%) exhibited fair attitude and 416(41.6%) showed fair practices. In this study fewer members were in good category. Merely 222 (22.2%), 206 (20.6%), 173 (17.3%) parents were in good category of knowledge, attitude and practice respectively.The oral healthknowledge, attitude and practices among parents are still below the acceptable level and thus subsequently the significance of oral health ought to be persuaded.

The current study specifically evaluated the knowledge, attitude and practice of guardians with respect to oral health. A solid negative relationship was found between them. Parents with great knowledge, attitude and practices had less prevalence of any oral disease in youngsters and correspondingly parents with low knowledge, attitude and practice in regards to oral health had kids with high pervasiveness of dental diseases with statistically significant p-values. Parents obviously need something more than basic information and encouragement to change their ordinary way of behaving. A legitimate counselingalong with demonstration and functional help regarding oral health practices is needed before they feel that they can place their knowledge into everyday practice. Kay and locker in the year 1996[17] stated the importance of oral education in raising the level the level of knowledge along with changing the attitude and belief regarding the same. T.I Wigen and N.J Wang in 2012[18] communicated their views in a paper and found results while studying various Norwegian studies, that characteristics especially education of parents was a consistent fund to be associated with oral hygiene practices in preschool children.

Pearson relationship [Sig. (2-tailed) at 0.01] was done in our study, to evaluate a correlation between the financial status and knowledge, attitude and practices of parents. A statistically significant result was obtained which reported a firmly certain connection between's the two. Results evaluated that parents working in upper class had great knowledge, attitude and practices (6.784±1.22, 4.542±1.068, and 6.348±1.476), while parents working in lower class

had generally fair knowledge, attitude and practice regarding the same (4.781±0.93, 3.258±0.806 and 4.056±1.07) and the parents who belonged to lower class, larger part of them had poor knowledge attitude and practice (2.500±0.707, 1.500±0.707 and 3.00±0.00).

The P value for this correlation was measurably significant (0.000). Jain et al (2014)[13] led similar comparative investigation and discovered that parents with higher financial status showed better knowledge (3.85±2.4), attitude (4.28±1.3) and practices (4.18±1.5) than those of lower financial status. Studies by Suresh et al (2010)[19] and Williams et al (2002)[20] have additionally shown that parents with lower schooling had poor dental knowledge and attitude levels. Potential guardians with advanced education level are bound to have positive health perspectives and render more attention to the health of the child. Thus it can be predicted that parent's knowledge on oral cleanliness significantly affect their youngster's oral health. The growing experience for the kids begins from home. So satisfactory and adequate dental health training for parents is vital with respect to the impact of their dental health habits on their kid's oral health.

CONCLUSION

Within the limitations of the study it can be concluded that parents with good knowledge, attitude and practices regarding oral health of their children had less prevalence of any dental disease in their children. Positive correlations with statistically significant results were found between socio-economic status and knowledge attitude and practice of patients. The findings of this study and the literature review strongly support the option of to educating the general public about oral health care, which will be both cost-effective and efficient. The society needs to be made more aware of the knowledge and significance of deciduous teeth, as well as the necessity of regular dental visits. The oral health care for infants, particularly regular dental visits, must be taught to expectant parents and healthcare providers.

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