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Knowledge of Pediatricians about Oral Health Care of Children

Seema Imtiaz [a], Yasir Raza [b], Shazia Parveen Rajper [c], Nida Talpur [a], Sadaf Ali [c], Munir Ahmed Banglani [d] and Salman Shams [e*]

[a] Community Dentistry Department, Faculty of Dentistry, Liaquat University of Medical and Health Sciences, Pakistan.
[b] Operative Dentistry Department, Muhammad Dental College, Mirpurkhas, Pakistan.
[c] Operative Dentistry Department, Ziauddin College of Dentistry, Karachi, Pakistan.
[d] Department of Oral Biology, Faculty of Dentistry, Liaquat University of Medical and Health Sciences, Pakistan.
[e] Department of Oral Medicine, Faculty of Dentistry, Liaquat University of Medical and Health Sciences, Pakistan.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Original Research Article

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ABSTRACT

Objective: To assess the knowledge, attitude and behavior of pediatrician's according oral health in children.
Design: Cross sectional descriptive study.
Setting: The study was conducted at LUMHS Jamshoro and civil hospital Hyderabad on January 15th and February 28th 2019.
Methodology: This cross sectional survey of 100 pediatricians including postgraduate trainee of institute of Liaquat University of Medical & Health Science Jamshoro and civil hospital Hyderabad. Distinguish the knowledge, attitude and behavior of pediatricians regarding basic oral health care of children which concluded by questionnaire.
Results: A systemic random sample of 100 pediatricians participated. The pediatrician's knowledge score was significantly not as good but all pediatricians stated it is important for pediatrician to be familiar with oral health in children.

**Corresponding author: E-mail: Salman_omfs@hotmail.com;*

Conclusion: In the event that there is further assimilation with dentistry, paediatricians' understanding of oral health may and must be enhanced, particularly when doctors are still in Graduation or Post-Graduation.

Keywords: Pediatricians; oral health; children; knowledge; attitude.

1. INTRODUCTION

Oral health is linked to overall health. These two are interdependent and have psychological, biological, emotional, and age-related consequences for one another. There are numerous oral disorders that have a significant impact on overall health, and certain systemic conditions may collaborate with oral health, therefore many systemic diseases begin in the mouth [1].

Pediatricians are Health specialists as they look after the progressions of growth and development of children from birth and must be capable to inform parents which concerning basic oral healthcare prevention, diagnosis on expected time when pathological changes occur in the oral cavity and suitable recommendations for the children [2-4].

Physicians, pediatricians, and other primary care professionals typically meet children at-risk before their first dental appointment, thus it is the pediatrician's responsibility to advise them and encourage them to take preventative action. 4 Early detection and diagnosis of any dental health concerns in children under the age of one year increases the chances of detecting risk factors [5].

According to certain research, a child sees a paediatrician and a general practitioner around 35 times during his first year of life, but the majority of children under the age of three do not have a dental checkup [6-7]. According to other research, by the age of three, children are seen 11 times for a medical visit. Professional dental care is not available to all children. A child's initial visit to an oral health care practitioner is frequently preceded by contact with a doctor [8].

According to Bozorgmehr et al's research, which aimed to consider pediatrician's knowledge, practice, and attitude in the field of children's dental care in Kerman, it was discovered that there is a lack of physician knowledge in this field, and that the majority of physicians believe they have a fundamental duty to children's oral health [9].

Behind the surgeon General's information, the American pediatrics academy delivered a statement that, they work with pediatric health care and pediatrician's professionals to build a knowledge towards implement oral health risk assessment on all patients which start by 6 months of age [10]. Health care workers and pediatrician's suppliers could perform an important role in maintenance of best protective and also beneficial oral health in children [11]. The main theme of the guidance is the information of physicians about dental health, which has been arranged by the American academy of pediatric dentistry in that they guideline on oral health screening and inspection for pediatricians [12].

It is essential for pediatricians to be aware of pathophysiology and related risk factors of early childhood dental caries. Primarily effects of dental caries occur or show its effects at the three years of age, as pediatric health care professionals and other pediatricians are more likely to encounter children at this age than are dental surgeons, and pediatricians will be capable to make proper assumption about referring children to a dentist for actual intermediations [13].

According to several studies relating pediatricians knowledge in preventative dentistry, pediatricians will be able to detect any abnormalities in dental or occlusal development early on, and it will be pediatricians responsibility to advise parents to send their children to the dentist. And because they are the link between the family and the dentist, the pediatrician's role to finance for training and prevention is crucial [14].

Many researchers have publicized that the practice and knowledge of pediatricians is less than sufficient concerning to oral health [15]. Pediatricians must be familiar with disease progression, signs, symptoms, preventative risk factors, and intervention options in order to offer an accurate assessment of children's oral health concerns [16]. Pediatricians can be responsible for screening facilities for early diagnosis and finding of oral disease, and aware to them about

the need to seek oral health and dental care and refer those children in requisite to dentist [5].

Thus, the purpose of this study is to assist the knowledge, behavior, perception, and clinical experience of the pediatricians on the base of questionnaire and also determine pediatricians' opinions towards oral healthcare of children. Main aim of this research is to develop knowledge which is concerning the prevalence of oral health in the pediatric practice.

2. MATERIALS AND METHODS

2.1 Setting

This Cross sectional descriptive study with non probability convenience sampling was conducted on pediatricians and pediatric residents from institute of LUMHS Jamshoro and civil hospital of Hyderabad. The study was conducted on 100 subjects.

2.2 Inclusion Criteria

- Pediatrician's and pediatric residents (post graduate students)
- Both genders.

2.3 Exclusion Criteria

- Participants who refused to participate in the research study were excluded.

2.4 Data Collection Procedure

This cross-sectional study was conducted on pediatricians and pediatric resident of LUMHS Jamshoro and civil hospital Hyderabad. The study was conducted on January 15th and February 28th 2019. Total 100 subjects fulfilling the inclusion criteria were included in this study. A piloted questionnaire and an informed consent form that explained about the purposes of the study and guaranteed data confidentiality were distributed among eligible subjects. Earlier the survey their consent was obtained. All the information of this research concerning the variables of study was collected through closed ended questionnaire. The questionnaire had 14 questions that asked about physicians' knowledge, attitudes, and conduct when it came to oral health and dental disorders in children. There are two sections to the questionnaire. The first half of the questionnaire asked about age, gender, years of experience as a pediatrician, clinical practice location, and designation, while the second piece had 14 questions regarding prevalent dental disorders among children. There were most of questions used to acquire the information concerning children's dental problems, and whether education and securing more information on this matter is needed.

2.5 Data Analysis

The data was analyzed by SPSS version 16. Entered data were subjected to descriptive statistics in the form of frequency and percentages.

3. RESULTS

The questionnaire was provided to 100 pediatricians in LUMHS Jamshoro and civil hospital Hyderabad for this cross-sectional observational study. The majority of the study contributors were females, accounting for 66 of the 100 participants. As seen in the graph, female doctors numbered 66 and male pediatricians numbered 34.

Data was collected through questionnaire which containing 14 questions. The response rate of data collection was good. The results show that, all pediatricians said that assess the oral hygiene during physical examination are essential in preventing oral diseases. The results of this study are described and respond answers of questionnaire are tabulated.

4. DISCUSSION

This study on paediatricians' behaviour, which involved using a questionnaire to examine their knowledge and recommendations for children's oral health, indicates that physicians strongly think that they play an essential role in children's oral health. Pediatricians and paediatric residents from LUMHS Jamshoro and the civic hospital in Hyderabad participated in this study. The findings provide useful information for the development of oral health initiatives aimed at the education of these and other health professionals who interact with children.

The main bulk of the applicants (68.1%) revealed routinely examining the oral cavity of their patients, this figure is, conversely, lesser than stated in previous research (87-100%) but according to Majority of this study, (63%) participants reported about assess the oral cavity of their patients on the request of their parents [17].

Table 1. Shows detailed questions asked from pediatricians

1. How much is your duration of practice (in years)?		
A	0 to 10 years	20
B	10 to 20 years	40
C	20 to 30 years	15
D	Above to 30 years	25
2. Do you assess for dental problems during the physical examination?		
A	Not at all	10
B	In case of problems	27
C	On the request of parents	63
3. How often do you approach to oral health content in residence?		
A	Yes	80
B	No	20
4. Do you have an idea when the first tooth erupts in mouth?		
A	3 Months	4
B	6 Months	80
C	12 Months	16
5. How you diagnose caries (tooth decay)?		
A	Cavity in tooth	54
B	Dark spot on tooth	34
C	White spot on tooth	12
6. Do you restrict the sugary food so, what type of restriction to sugary foods do you make to your patients?		
A	Avoid chewy sweets	50
B	Do not consume between meals	10
C	Avoid sweets in general	40
7. Do you associate the eruption of primary teeth with systemic manifestations (fever, diarrhea, etc.)?		
A	Yes	64
B	No	36
8. Do you think that Cavity-causing bacteria can be transmitted between mother and child?		
A	Yes	18
B	No	60
C	Not sure	23
9. Do you think only bottle-fed children get early childhood caries (baby bottle tooth decay)?		
A	Yes	36
B	No	64
10. Do you think that Baby teeth are important even though they fall out?		
A	Yes	82
B	No	18
11. Bottle feeding at night leads to dental caries?		
A	Yes	68
B	No	32
12. Do you think that thumb sucking is a risk factor for dentoalveolar malformation (malocclusion) in children?		
A	Yes	63
B	No	21
C	Not sure	16
13. How much time you recommended for breastfeeding?		
A	6 months	14
B	More than 6 months	86
2. 14. Do you believe that breastfeeding may cause to caries?		
A	Yes	8
B	No	92

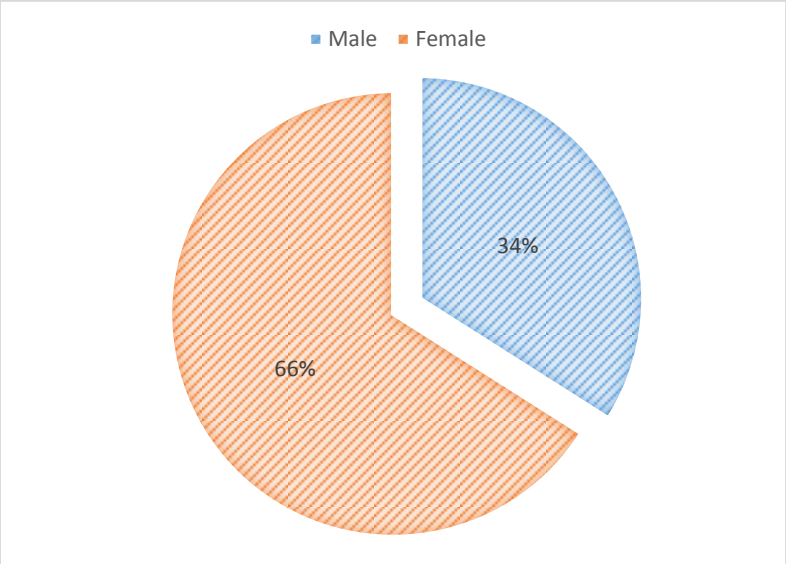

Fig. 1. Male and female ratio

Mainly defendants (40%) conveyed that they orienting their patients to escape consumption of sweets in general, while other (10%) recommended the non-consumption of sweet between meals; this ratio was different and worse than the 67% stated according pervious study [18].

Main bulk of physician informed that they play a main part and are involved in supporting the oral health; though, hardly some physicians stated mentioning that a first visit to the dental surgeon earlier at the first decade of life [19]. According to new rule of American academy of pediatrics they suggested that referring a child for dental health checkup within six months' eruption of 1st deciduous tooth but not later than one year [20].

According to a new study on doctors' knowledge and attitudes, the problem of non-nutritive sucking practices goes mostly neglected when it comes to tooth health. The results of the current study show that the participants did not recommend or authorize the use of a pacifier, and that the majority of physicians did not mention the use of a pacifier to replace figure sucking, but that they did recommend the use of an orthodontic pacifier [21].

The tooth eruption process cannot be considered a key etiological cause of systemic manifestation, but it is a physiological process that may be improved if it is linked to child anxiety, as the surveyed physicians have confirmed. Irritability, increased salivary secretions, lack of appetite, diarrhea, rash, and a runny nose have all been associated to the eruption of deciduous teeth. Teeth, on the other hand, cannot be blamed for serious signs and symptoms like fever. The interval between medical appointments had no effect on the conduct of the pediatricians.

Breastfeeding is extremely essential, and its influence on a child's quality of life and health is well-known. Breastfeeding should be continued until at least 6 months of age, according to the WHO, as this reduces the frequency of non-nutritive sucking behaviours (pacifier sucking, digital, nail biting, and so on) [22].

According to this study, as well as previous studies, it is critical to distinguish between the two and make pediatric doctors aware of their role in avoiding oral disorders.

5. CONCLUSION

Finally, the majority of doctors do not have a thorough grasp of children's oral health. It is recommended that all pediatricians, as well as current postgraduate studies in pediatrics, increase their understanding of fundamental oral healthcare in children. As a result, more research is required. And all doctors think that it is their responsibility to prevent oral illness in youngsters and to examine their patients' teeth.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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