

**KNOWLEDGE OF PEDIATRICIANS ABOUT ORAL HEALTH CARE OF  
CHILDREN**

**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 15<sup>th</sup> and February 28<sup>th</sup> 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.

**CONCLUSION:** we conclude that pediatricians' knowledge regarding oral health can and must be upgraded, in case that, there is further assimilation with dentistry area, particularly while doctors are still in Graduation or Post-graduation.

**KEYWORDS:** *Pediatricians, Oral health, Children, Knowledge, Attitude*

## **INTRODUCTION**

Oral health and general health these two are reliant on to one another and have psychological, biological, emotional and age-related effects on each other. There are many oral diseases which substantial effect on general health and some systemic condition may show collaboration with oral health, so that initial indication of many systemic diseases happen in oral cavity.<sup>1</sup> 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.<sup>2-3</sup>

Physicians, pediatricians and other primary care clinicians frequently see children throughout at-risk age before the first dental visit so that pediatrician's duties to inform them to take preventive action.<sup>4</sup> An early finding and diagnosis of any dental health problems in children below one year of age is a great chance for the detection of risk influences.<sup>5</sup>

Some studies revealed that a child appointment pediatricians and general practitioners around 35 times throughout the first year of his life, whereas record that maximum number of children less than three years old do not take dental examination.<sup>6-7</sup>

in other studies, revealed that, children are seen 11 times for visit with a physician by three years of age. Not all children have contact to professional dental care. Contac of child with pediatrician usually occur before than a child's first visit to an oral health care provider.<sup>8</sup>

According to Bozorgmehr et al's research, which aimed to consider pediatrician's knowledge, practise, 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.<sup>9</sup>

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.<sup>10</sup> Health care workers and pediatrician's suppliers could perform an important role in maintenance of best protective and also beneficial oral health in children.<sup>11</sup> 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.<sup>12</sup>

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.<sup>13</sup>

According to some researches which related pediatricians' knowledge in preventive dentistry, therefore, pediatricians who will be capable to analyze any anomalies on dental or occlusal development from the initial, and there for its pediatricians' duties to guiding parents to take their children to dentist. And its pediatrician's responsibility subsidize for instruction and prevention is significant, because they are the link amongst the family and the dentist.<sup>14</sup>

Many researchers have publicized that the practice and knowledge of pediatricians is less than sufficient concerning to oral health.<sup>15</sup> For pediatricians provide well statement of children's oral health problems, they must have knowledge of the disease progression, signs, symptoms, prevention risk factors and intervention approaches.<sup>16</sup> 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.<sup>5</sup>

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.

## **MATERIALS & METHODS**

### **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.

### **INCLUSION CRITERIA:**

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

### **EXCLUSION CRITERIA:**

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

### **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 15<sup>th</sup> and February 28<sup>th</sup> 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 were 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 paediatrician, clinical practise 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.

### **Data analysis**

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

## **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.

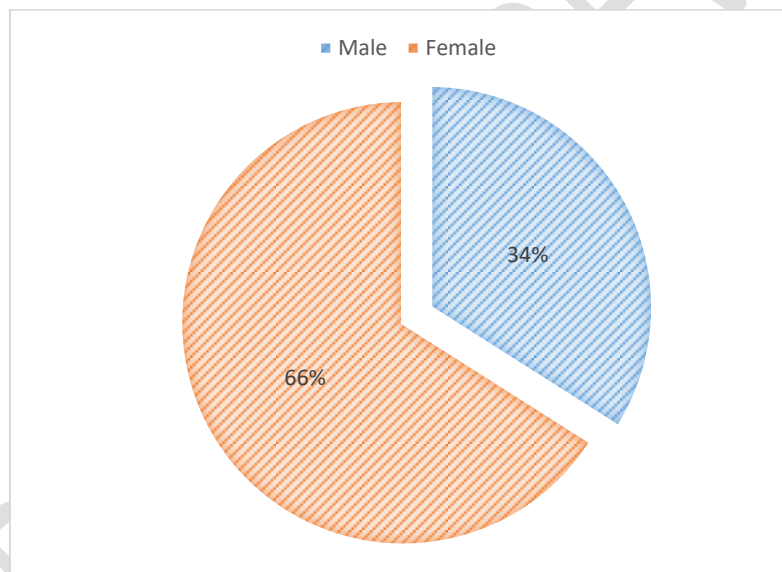


Fig 1: Male and female ratio

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.

**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	23
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
14. Do you believe that breastfeeding may cause to caries?		
A	Yes	8
B	No	92

## DISCUSSION

This study on the conduct of pediatricians which concerning about to assess the knowledge and also guidelines regarding oral health of children through questionnaire, confirms that pediatricians tremendously believe that they play an important role in the oral health of children. This study conducted on pediatricians and pediatric resident of LUMHS Jamshoro and civil hospital Hyderabad. The results of this deliver valuable data for invention of oral health approaches directed at the education of these and other health specialists who work 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.<sup>17</sup>

Mainly defendants (40%) conveyed that they orienting their patients to escapeconsumption 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.<sup>18</sup>

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.<sup>19</sup> According to new rule of American academy of pediatrics they suggested that referring a child for dental health checkup within six months' eruption of 1<sup>st</sup> deciduous tooth but not later than one year.<sup>20</sup>

New research which was on the knowledge and attitude of pediatricians, according to that research they deliberate, the mostly unnoticed to dental health is the problem of non-nutritive sucking habits. The data from the current study determine that the participants did not suggest or

did not permit the practice of pacifier and the most of the pediatricians did not they mention about replacement of finger sucking through pacifier, however; they knew of commend the use of an orthodontic pacifier.<sup>21</sup>

The tooth eruption process cannot be considering as a primary etiological factor of systemic manifestation but it is a physiological, and can be improved if it is related with child anxiety, circumstance is that substantiated by the surveyed pediatricians. The emergence of the deciduous teeth was linked to irritability, increased salivary secretions, lack of appetite, diarrhoea, rash, and a runny nose. The occurrence of severe signs and symptoms such as fever, however, cannot be attributed to teeth. The paediatricians' behaviour was unaffected by the time between medical practices.

Breastfeeding is very important, impact on the child's quality of life and health is well familiar. According to WHO they mention that breastfeeding must be absolutely utilized till at least 6 month of age; this lower the frequency of escalating non-nutritive sucking habits (pacifier sucking, digital, nail biting etc).<sup>22</sup>

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.

## CONCLUSION

The goal of this study is to measure pediatricians knowledge and attitudes towards children's oral health. Finally, it may be stated that the majority of pediatricians have insufficient understanding of children's dental health. It is suggested to all pediatricians and the current postgraduate training in pediatrics, knowledge about oral health can and must be improved of basic Oral healthcare in children. So, further studies are needed. And all pediatricians believe that they had an essential duty in preventing oral disease in children and provide oral examination on their patients.

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