IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 24, Issue 8 Ser. 5 (August. 2025), PP 61-63
www.iosrjournals.org

Assessment Of Knowledge And Attitude About Oral Health Of Pediatric Population Among General Medical Practitioners.

Author

Abstract
Introduction- The mouth or oral cavity is known as a mirror of the body or disease and hence considered as early warning system. As the gateway to the body, there is constant ingress of various micro-organisms like bacteria, viruses, parasites, and fungi which challenges the mouth. There are many oral lesions which are associated with systemic diseases and thus early detection of these lesions helps in early diagnosis of systemic disease. If it is ignored, it can contribute to more harmful diseases which can seriously affect the quality of life. American academy of pediatric dentistry (AAPD) recommends that general health care providers including the pediatricians must include the preventive oral health strategies in their patient care protocols.
Aim- To assess the knowledge and attitude of paediatric dentistry among general medical practitioners and create a positive attitude and behaviour towards oral health.
Materials and methodology- The present study is a cross-sectional survey conducted among medical practitioners. The study was conducted amongst 200 medical practitioners. The data about their knowledge and attitude about oral health of pediatric population was collected through a self-administered questionnaire.
Results- Maximum General Medical practitioners gave negative response to the questions asked regarding oral health of children.
Conclusion -Medical practitioners had a moderate knowledge and attitude towards pediatric oral health.
Keywords- *Knowledge, attitude, pediatric dentistry, general practitioners.*

Date of Submission: 12-08-2025 Date of Acceptance: 22-08-2025

I. Introduction

Children and young adults often lack good oral hygiene and hence develop carious lesions, these carious lesions if left untreated, increases the invasion of microbes into deeper tissues like pulp which eventually lead to deeper carious lesions.[1] The dental disease is not just a minor disease of the gums or teeth, but it is a disease of the body that happens to initiate in the oral cavity.[2]

Oral cavity is considered as a gateway to the body, hence there is constant invasion of around 10^4 micro-organisms which creates unhealthy environment of the oral cavity. These lesions are present on various sites in the oral cavity like oral mucosa, tongue, gingiva, dentition, periodontium and other related structures.[3]

Oral cavity is considered as an important diagnostic area because it shows early signs and symptoms related to any systemic disease in the form of its oral manifestations and thus helps in its early diagnosis and also it contains derivatives of all of the primary germinal layers which are not present anywhere else in the body.[4]

As Oral diseases are not confined only to the oral cavity, in the similar way only dentist should not be the ones to look after oral health solely. It should be the responsibility of all the stake holders including the guardians, dentists, allied dental professionals, and general health care providers to look after oral health.[5]

American academy of pediatric dentistry (AAPD) recommends that all general health care providers should carry out oral health risk evaluation of children at 6 months of age and suggest dental referrals and must include the preventive oral health strategies in their patient care protocols.[6]

Physicians should also play a important role in counseling the patients regarding oral health and educating their patients about the dental disease which also affect their overall health and why they need to get rid of dental disease and restore their mouths to a healthy and functional state[2]

The role that a medical practitioner can play in improving oral health of the population depends on his own knowledge about oral disease and their effect on general health, his attitude towards dentistry and their routine practice to maintain oral health. Hence the present study was undertaken to assess knowledge, attitude and practice of dental awareness among medical practitioners.[2]

II. Materials And Methods-

A cross sectional survey was conducted among the general medical practitioners regarding their knowledge and attitude of pediatric dentistry among pediatric population. Sample size conducted for the study is 200 general practitioners . A self administered questionnaire which consisted of 20 questions which were used to analyze the knowledge and attitude of general practitioners towards oral health of pediatric population.

Inclusion criteria

Medical practitioners and medical post graduate students.

Exclusion criteria

Non medical population.

III. Results

1.Are you aware that disturbed sleep cycle in paediatric patients is related to dental pain?	39.5%	60.5%
2. Are you aware that swollen lymph nodes in children in the cervical region can be related to dental pain?	42%	58%
3. Are you aware that a child aged 1to 2 years brought to the clinic with the complaint of constant crying and irritability can be related to dental pain?	39.5%	60.5%
4. Do you examine oral cavity of each paediatric patients in oral cavity?	32%	68%
5. Do you consider diet counseling of the paediatric patients? And correlate it with findings in the oral cavity?	39%	61%
6. Are you aware that swellings in the oro-facial and/or neck region in children can be related to dental problems?	44%	56%
7. Whenever you find a patient with dental caries , do you consider them to be referred to the paediatric dentist?	43%	57%
8. Do you know how to identify early childhood caries, and what case is to be referred to a paediatric dentist?	35%	65%
9. Are you aware the first appointment of a child with a paediatric dentist can begin at the age of 0 years?	29%	71%
10. Do you know the importance of assessing the child's fluoride exposure?	33%	67%
11. Are you aware of the treatment of an avulsed tooth while treating a paediatric case with trauma/RTA?	32.5%	67.5%
12. Are you aware of the adverse effects of natal teeth (tootherupted within 1 month), its effect on breast feeding and management?	37%	63%
13. Are you aware of the developmental anomalies that a child may present during birth itself and also the role of a paediatric dentist in managing them?	35%	65%
14. Are you aware that the majority of genetic deformities/syndromes have a dental component involved?	36.5%	63.5%
15. While instructing mother for the care of the child, do you give oral hygiene instructions to the the parents for their children?	39%	61%
16. Do you know the persistent habits of bottle feeding/pacifier sucking can have a effect on future occlusion of the patient?	42.5%	57.5%
17. Do you know the behavior management is an essential part of the paediatric counselling ? Is this routinely used during paediatric medical OPD?		
18. Are you aware that some oral symptoms may point at some systemic disease?	40.5%	59.5%
19. Are you of the opinion that similar to regular medical check-ups, regular dental visits should be advised to paediatric patients?	46.5%	53.5%
20. Do you agree that a paediatrician and a paediatric dentist should work as a team so as to manage the overall health of a child?	86%	14%

IV. Discussion-

General practitioners mostly gynaecologists and pediatricians play a connective role between dentists and child. Dental diseases or various anomalies can be treated early if it is diagnosed on initial stages of disease .This study accentuates the vital role about enhancement of oral health by general practitioners.

In present study drawing attention to the present dental knowledge 60.5% of general practitioners were not aware about the disturbed sleep cycle in pediatric population.

Fifty eight percent of the medical population were not aware about swollen lymph nodes in cervical region can be related to dental pain. Any infection may it be viral or bacterial can cause lymph nodes to swell. Also leukemia or tooth abscess or any oral injury can lead to inflammation of swelling.

Sixty percent of medical population were not aware about the fact that the irritability or crying of a child can be related to dental pain. 68% of medical population did regularly performed oral examination of pediatric patient but 32% of medical population failed to examine the oral cavity of child. About 61% of medical population were not aware about diet counseling of pediatric patients and can correlate with the oral findings. Levels of sugar exposure in oral cavity play a crucial role in caries exposure on tooth surfaces. Diet also plays a important role in determination of overall conditions of oral tissues [9]. 56% were not aware about

relation of oro-facial or neck swellings related to dental problems . It can be due to dental infections or oral injuries . It can act as indicative factor for any periapical or periodontal abscess. 57% of medical population were not aware about the fact that if found with the diagnosis of dental caries the respective patient should be referred to the pediatric dentist. This ensures early treatment of disease at any early stages and help to conserve the natural tooth structure[8]. 65% of medical population were not aware about early childhood caries and the case referred to the pediatric dentist . 71% of medical population were not aware about the fact the 1st appointment of child with the pediatric dentist begins at the 0 years . This helps in evaluation of eruption status of deciduous dentition and also to rule out any dental anomaly related to same[9]. 67% of medical population were not aware about assessment of fluoride exposure in child. They were aware about the role of fluoride toothpastes . Nearly 40% of practitioners were unaware about role of fluoride sealants and their role in prevention of dental caries. 67.5% of practitioners were not aware about treatment of avulsed teeth in case of trauma/RTA[7]. They were unaware about the fact that fractured tooth can restored within 1hour depending upon line of fracture if kept in proper preserving medium . 63% of population were unaware about the adverse effects of natal teeth and its adverse effects on breastfeeding . It can also hamper in creation of sucking pathway for tongue and cause irritability in child due to hunger[7]. 65% of medical practitioners were unaware about the developmental dental anomalies in child during birth itself. Like fusion or germination of tooth bud and its adverse effects during eruption. 63.5% of practitioners were unaware about the fact that majority of genetic syndromes/deformities have dental component involved[7]. 61% of practitioners were unaware about oral hygiene instructions to be given for oral care of the child to the patient. Brushing techniques , oral care ,diet plan should be suggested[7]. 57.5% were unaware about the persistent habits of feeding/ pacifier sucking . It can have adverse effects on future malocclusion or development of any habit [10]. 64% of practitioners were unaware about role of behaviour management in pediatric dentistry. 59.5% were unaware about oral symptoms that can be useful to diagnose any systemic condition associated to it. 53.5% of practitioners did not stood with the opinion that like regular medical checkups, regular dental checkups should also be implemented. Whereas 46.5% of population agreed as it can be helpful in early assessment of any disease or pathology[8]. 86% of medical practitioners agreed that a pediatrician and a pediatric dentist should work as a team to manage the overall health of the child.

V. Limitation

The limitation of the survey was the inability to use the open minded questions to probe the participants response to greater extent.

VI. Conclusion

The study indicates the medical practitioners lacked knowledge and attitude towards pediatric dental health. They should be well acquainted with oral health tissues. And thus they lack dental health education and thus it becomes difficult for them to promote prevention of dental diseases.

References

[1] Mcdonald RE, Avery DR, Dean JA, Ed. Treatment Of Deep Caries, Vital Pulp Exposure And Pulpless Teeth. In: Dentistry For The Child And Adolescent. 8th Ed., St. Louis: Mosby Elsevier; 2007. P. 396.
[2] Patil A, Chavan S, Baghele ON. Awareness Of Oral Health Among Medical Practitioners In Sangamner City — A Cross Sectional Survey. JIDA 2010;4(12):534–536.
[3] Long RG, Hlousek L, Doyle JL (1998) Oral Manifestations Of Systemic Diseases. Mt Sinai J Med 65: 309-315.
[4] Cheraskin E (1958) Oral Manifestations Of Systemic Diseases. J Natl Med Assoc 50: 241-247.
[5] Goyal A, Grover A, Gauba K, Gupta A, Mehta N, Dutta S, Et Al. A Community-Based Pragmatic, Controlled Trial For Preventing And Reducing Oral Diseases Among 1–6-Year-Old Children Visiting Anganwadi Centers, Under The Integrated Child Development Scheme, India. BMC Public Health 2019;19:1626.
[6] Berkowitz SF. American Academy Of Paediatrics Policy Statement. Pediatrics 2003;111:113-5
[7] 7.Int J Clin Pediatr Dent. 2018 Sep-Oct; 11(5): 375–381. Published Online 2018 Oct Doi: 10.5005/Jp-Journals-10005-15432 .
[8] Patil A, Chavan S, Baghele ON. Awareness Of Oral Health Among Medical Practitioners In Sangamner City- A Cross Sectional Survey. JIDA. 2010;4(12):534–536.
[9] Poornima P, Bajaj M, Nagaveni NB, Roopa KB, Neena IE, Bharath KP. Evaluation Of The Knowledge, Attitude And Awareness In Prevention Of Dental Caries Amongst Pediatricians. International Journal Of Community Medicine And Public Health. 2015;2 (1): 64–70.
[10] Umesh , Nagesh L, Sangeeta C. Assessment Of Knowledge, Attitude And Practices Of Medical Practitioners Towards Dental Care In Rural Areas Of Davangere Taluk. International Journal Of Current Research. 2014;6(10):9275–9278.
[11] Sabbagh HJ, El-Kateb M, Al Nowaiser A, Hanno AG, Alamoudi NH. Assessment Of Pediatricians Dental Knowledge, Attitude And Behavior In Jeddah, Saudi Arabia. J Clin Pediatr Dent. 2011;35(4):371–376. [Pubmed]