



CODEN [USA]: IAJPBB

ISSN : 2349-7750

## INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187

<https://doi.org/10.5281/zenodo.7539161>
Available online at: <http://www.iajps.com>

Research Article

### ROLE OF PARENTAL AWARENESS OF CHILDREN'S DENTAL CARIES AND HOW TO FOLLOW UP ON TREATMENT

Dr. Ameera Ibrahim Amer<sup>1</sup>, Dr. Kholoud Abdullah Madini<sup>2</sup>, Dr. Reem Salah Binmahfooz<sup>2</sup>,  
Dr. Rawan Khalid Abujabal<sup>2</sup>, Dr. Ahmed muqbil Alluhaybi<sup>2</sup>, Dr. Abdurrahman Saud  
Almutairy<sup>2</sup>, Dr. Rasha Ateeq Alshaikh<sup>2</sup>, Dr. Abdulmajeed Reda Afandi<sup>2</sup>, Dr. Raneem  
Mustafa Ageel<sup>2</sup>, Dr. Fatimah Mohammed Banasser<sup>2</sup>, Dr. Raghad Hassan Alsharif<sup>2</sup>,  
Dr. Alaa Ali Alammar<sup>2</sup> and Dr. Zeynb Hassan Alfaraj<sup>2</sup>

<sup>1</sup> Consultant In Pediatric Dentistry In East Jeddah Hospital (Ejh) , Jeddah, KSA

<sup>2</sup> General Dentist, BDS, KSA

Article Received: October 2022

Accepted: November 2022

Published: November 2022

**Abstract:**

**Objective:** To explore the role of parent awareness in dental caries and follow-up treatment required for healing with oral issues.

**Methods:** The research was conducted through cross- a sectional research design. This type of research design helps measure the outcome during the exposure of all the participants. In other words, it is a type of observational study, thus, the prevalence of the research area can be easily estimated. The study population included parents from 25 to 40 years of age along with paediatricians in this domain. The population might of different ethnicity, socio-economic and lifestyle, also, the parents age might vary as many regions early marriage below 20 years might also occur.

**Results:** Study included 436 participants in which all of them were parents. Vast majority of them rated the importance of dental care very important (n= 399, 91.5%) and 33 participants rated as important (7.6%). On the other hand, less than 1% rated dental care as not important (n= 4). Vast majority of participants were aware of oral hygiene practices (n= 418, 95.9%). Some of study participants faced some dental issues within their families (n= 364, 83.5%). Participants used tooth brushing as a method for cleaning teeth (n= 158, 36.2%). Regarding the frequency of checking-up to the dentist, half of participants did every 12-24 months (n= 230, 52.8%) and the other half did in between 6-12 months (n= 206, 47.2%). About the reason why participants would not visit the dentist, high cost was the most prevalent among 242 participants (55.5%).

**Conclusion:** Study results showed that most of study participants reported the importance of dental care and were aware of oral hygiene practices. Participants of the current study did yearly check-ups with the dentist. The most frequent reason for not visiting the dentist was high coast. Participants received dental education on yearly basis.

**Corresponding author:****Dr. Ameera Ibrahim Amer,**

Consultant In Pediatric Dentistry In East Jeddah Hospital (Ejh) ,  
Jeddah, KSA

QR code



Please cite this article in press Ameera Ibrahim Amer et al, *Role Of Parental Awareness Of Children's Dental Caries And How To Follow Up On Treatment.*, Indo Am. J. P. Sci, 2022; 09(11).

**INTRODUCTION:**

Taking care of a child's teeth from a young age helps ensure that their first set of teeth, (those still developing under the gums) will develop healthy and strong. Some dental professionals believe that healthy habits for caring for one's teeth and gums should be established as early as possible. Adopting appropriate oral hygiene practices from a young age will help stave against problems like gum disease, cavities, and premature tooth decay in adulthood. Many medical professionals agree that taking a youngster for regular dental check-ups will help them develop good oral hygiene habits that will help them avoid a host of health issues as they become older [1-2].

The parents' perspectives on their children's oral health were investigated in a research [3], which polled 1248 parents in a Lithuanian city. The article also investigated people's perspectives on taking preventative actions to avoid dental issues. According to the results, well-educated, high-income parents tend to be more concerned about their children's oral health. Abanto and colleagues [4] did a research to see how dental caries and dental traumas affected parents' quality of life. The author surveyed over two hundred and nineteen people, and their responses demonstrated that severe dental injuries have detrimental effects on emotional and familial activities, which are far more significant than the consequences of acute dental injuries. Family income was also shown to be a strong factor of family life quality when it came to children's dental problems [4].

For their part, Gao, in 2013, pointed to poor diet and lack of oral hygiene as major causes of tooth decay. The purpose of the research was to learn more about how to include interview and client-centered therapy into traditional parent education. Thus, a sample size of no more than 12 people was used to draw conclusions about how boosting parental confidence and support might improve children's dental health [5]. Borges and others conducted an additional research in which they visited 58 preschools in Aracatuba, Sao Paulo, and Brazil to examine the effects of social behaviors on dental caries. The study's results showed a correlation between preschoolers' socioeconomic position and their rate of dental caries [6].

More than 2.3 billion people worldwide have dental caries, and that figure rises to 530 million among children, according to WHO data. Additionally, almost 47.2% of the adult population is above the age of 30. 70% of those over the age of 65 now have periodontal disease [7]. In addition, parents' lack of

knowledge about dental caries contributes to problems with their children's adult teeth later in life.

It is crucial to practice good dental hygiene from an early age on since tooth decay and gum disease cause physical and emotional discomfort. If there are problems with your teeth, it might affect your digestion as a whole since that's where the process starts. Since oral problems in old age may cause serious health problems, the study's results can be applied directly to clinical practice. The current research aimed to explore the role of parent awareness in dental caries and follow-up treatment required for healing with oral issues.

**METHODS:****Research Design**

The research was conducted through cross-sectional research design. This type of research design helps measure the outcome during the exposure of all the participants. In other words, it is a type of observational study, thus, the prevalence of the research area can be easily estimated [8].

**Approach**

The cross-sectional study design is observational; hence, an inductive research approach was used for understanding the patterns and developing theories on the interesting topic (in this case, it is the role of parent awareness in dental caries and follow-up treatment).

**Study Population**

The study population included parents from 25 to 40 years of age along with paediatricians in this domain. The population might of different ethnicity, socio-economic and lifestyle, also, the parents age might vary as many regions early marriage below 20 years might also occur [9].

**Study Sample**

The cross-sectional study design appropriately fits into simple random methods. This type of sampling method allows the scholars to select the participants randomly, hence, providing equal opportunities for all. In this type of sampling method, scholars are allowed for collecting huge data from different subsets, selected randomly [8].

**Study Tool**

The study was conducted through surveys and interviews, where participants were inquired through a set of closed-ended questions. A survey consisting of not more than 14 questions was prepared and forwarded to participants through e-mails, text messages, and other digital techniques. Experts in

paediatric dentists inquired about short interviews for acquiring professional insights into the study.

#### Data Collection

The data was collected through various techniques which would include primary and secondary sources. The nature of this research validates using primary information and aligning or evaluating with existing knowledge & practices.

#### Data Analysis

The information collected was evaluated through mathematical tools and software while the data from journals, articles, and publications were analysed using techniques like thematic or descriptive analysis.

#### Ethical Consideration

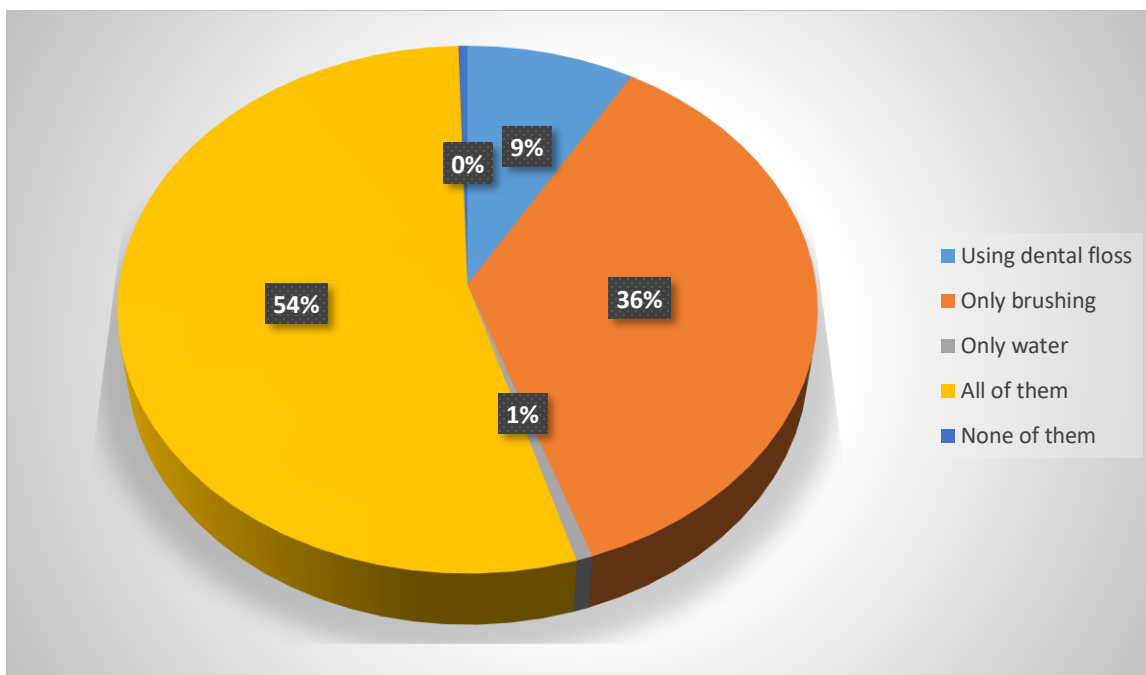
All the participants were required to sign on informed consent, while they were verbally communicated about the use and storage of information. All the information collected from secondary sources was in-texted and cited.

#### RESULTS:

Study included 436 participants in which all of them were parents. Vast majority of them rated the importance of dental care very important (n= 399, 91.5%) and 33 participants rated as important (7.6%). On the other hand, less than 1% rated dental care as not important (n= 4). Vast majority of participants were aware of oral hygiene practices (n= 418, 95.9%). Some of study participants faced some dental issues within their families (n= 364, 83.5%). Other responses are presented in table 1.

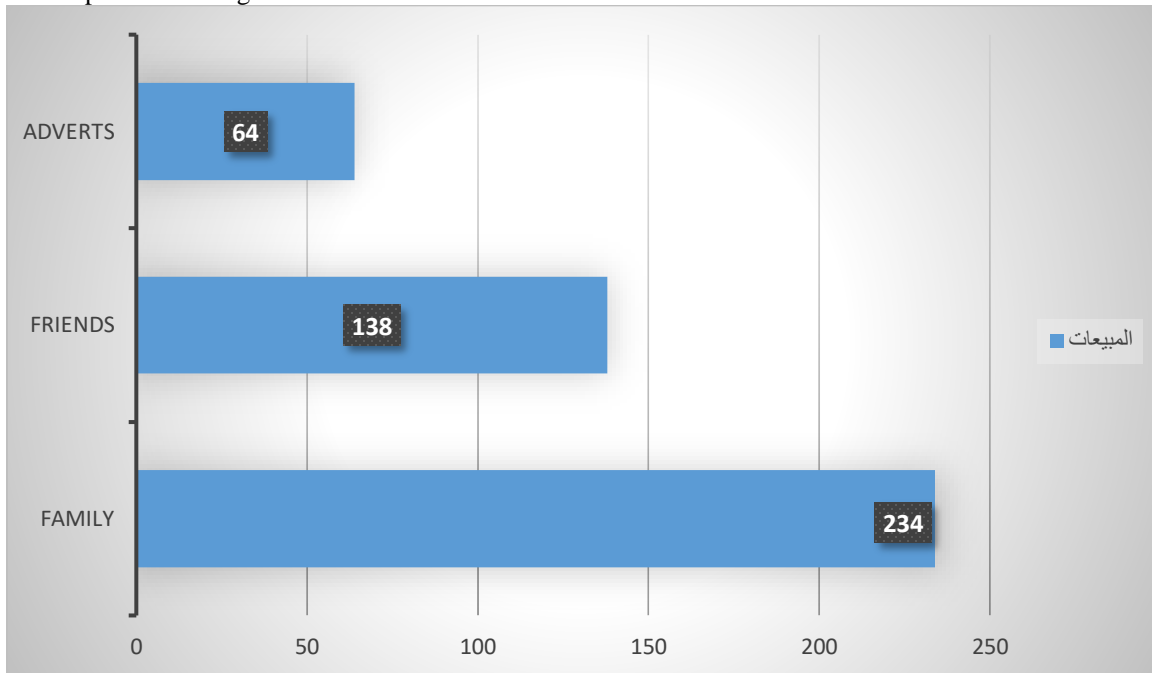
| Item  | Yes          | No           |
|---|--------------|--------------|
| Are you aware of oral hygiene practices?                        | 418<br>95.9% | 18<br>4.1%   |
| Do you follow the same in your routine family life?             | 402<br>92.2% | 34<br>7.8%   |
| Have you have faced any dental issues within your family?       | 364<br>83.5% | 72<br>16.5%  |
| Have you been notified about treatments or check-ups intervals? | 296<br>67.9% | 140<br>32.1% |

Participants used tooth brushing as a method for cleaning teeth (n= 158, 36.2%). Other methods used by study participants are presented in figure 1.



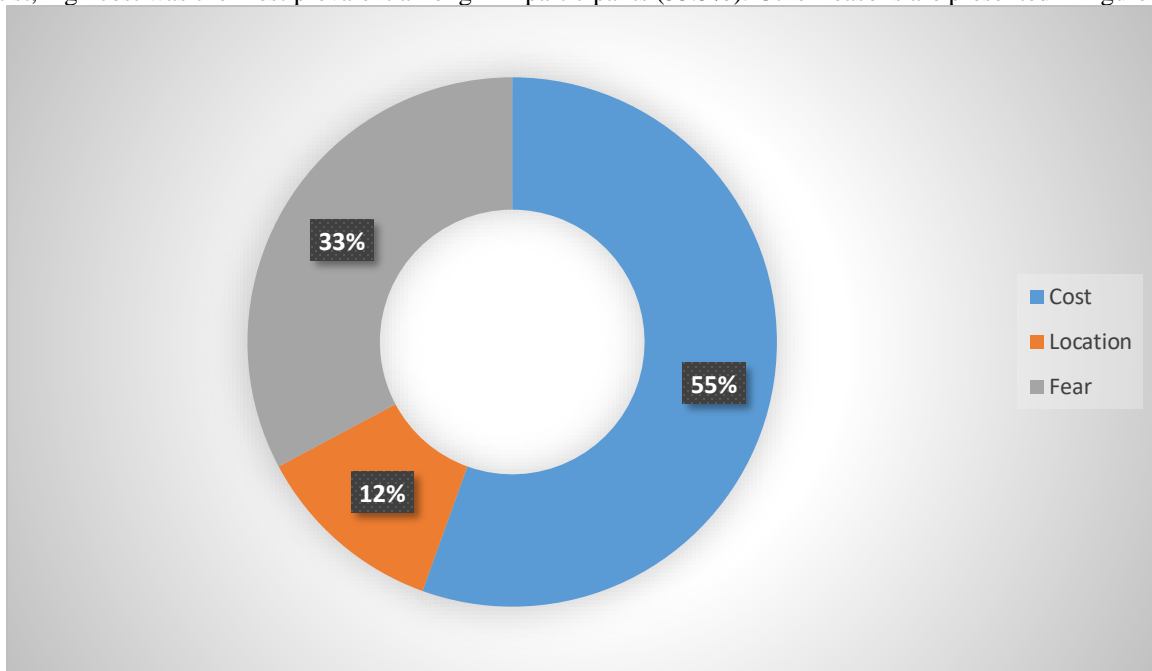
**Figure 1: Methods used to clean teeth among study participants**

More than half of study participants obtained information about the dentist through family (n= 234, 53.7%). Other sources are presented in figure 2.



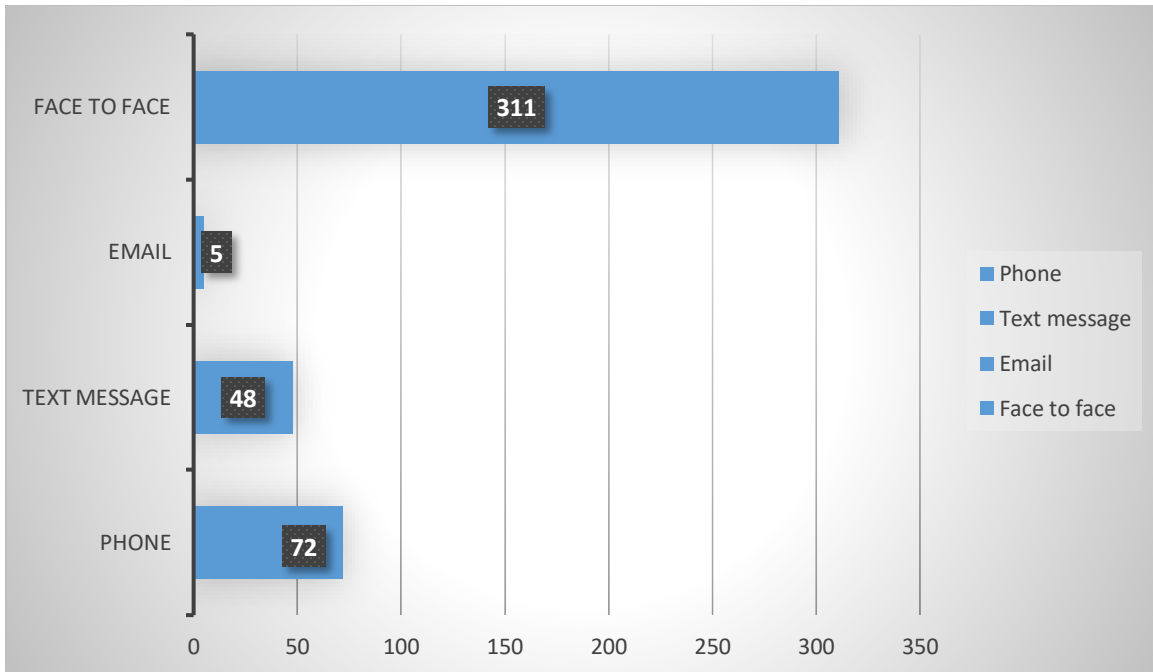
**Figure 2: Information sources about the dentist**

Regarding the frequency of checking-up to the dentist, half of participants did every 12-24 months (n= 230, 52.8%) and the other half did in between 6-12 months (n= 206, 47.2%). About the reason why participants would not visit the dentist, high cost was the most prevalent among 242 participants (55.5%). Other reasons are presented in figure 3.



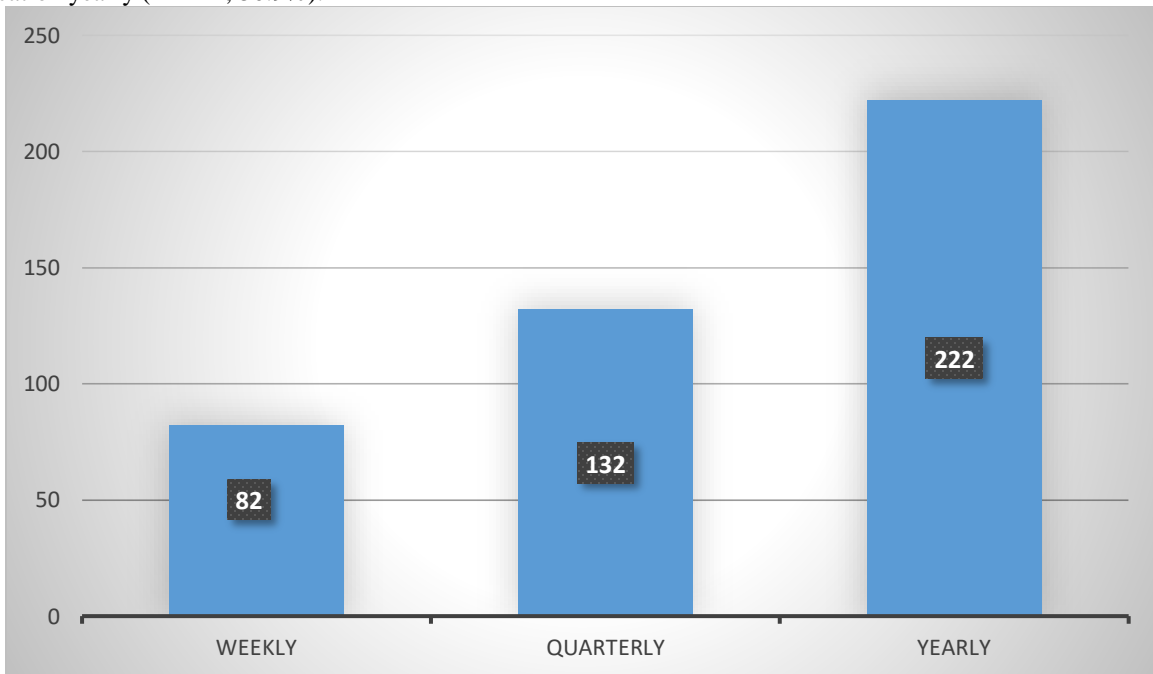
**Figure 3: Reasons of not visiting the dentist**

The last visit to the dentist was during the past 6 months among more than half of participants (n= 260, 59.6%) while it was during the past one year among 105 participants (24.1%). By contrast, 71 participants' last visit was during the past two years (16.3%). Participants were asked about the method of receiving information. Face to face meeting was the most frequent among 311 participants (71.3%). Figure 4 shows the tool used to give information.



**Figure 4: Method of giving information**

Participants received dental care education at different intervals as presented in figure 5. Half of participants received education yearly (n= 222, 50.9%).



**Figure 5: Dental care education intervals**

**DISCUSSION:**

The current study was a community-based cross-sectional research to assess parents' knowledge of the importance of oral health for their children. The incidence of dental problems like caries may be reduced by paying more attention to one's oral hygiene

routine [10-12]. It has been shown that children who have untreated dental caries are more likely to have

unpleasant experiences, visit the emergency room, lose permanent teeth (which may impair their chewing), and have defacement and destruction of their dentition [13]. Because of the severity of the

forementioned problems, it is crucial that children begin developing good oral hygiene habits as early as possible. The American Academy of Pediatric Dentistry (AAPD) advises that children should clean their teeth twice daily using a child-sized, soft toothbrush [14]. The school has also made it clear that if a kid is no longer considered dependent, it is the parent's duty to carry out this action [15]. Because of the negative effects that poor oral health may have on a child's development, it is crucial that parents be made aware of the need of providing their children with a healthy dental foundation. Recognizing parents' knowledge, abilities, and perspective is critical for raising kids' oral health awareness. It has been shown that when parents have a good mentality about their kid's oral health, their child grows up with a healthy mouth [16-17].

Results from a survey showed that although the majority of parents (64%) examined their children's teeth, only 38% went to the dentist during the first year, and parents' average knowledge of dental health was moderate (7.97 out of 16.0) [18]. Numerous studies found that the majority of parents viewed their children's oral health favourably. It also revealed that many moms didn't bother to protect their children's main teeth since they thought the baby teeth would fall out anyhow [14]. In other words, the moms weren't worried about their children developing dental caries, despite the fact that this condition is cumulative and has long-term consequences [15]. Deciduous dental caries, if left untreated, may lead to problems in the permanent dentition, including reduced social self-esteem and stunted development [16].

The [18] research also indicated that women and parents with college degrees had a greater awareness of children's dental health than those without such degrees or with lower levels of education. These results are consistent with earlier research that have shown that moms have a heightened awareness of the need of keeping their children's teeth healthy by ensuring that they eat a caries-friendly diet and wash their teeth twice a day. Primitive teeth are more valued by those from higher socioeconomic backgrounds and/or more academically accomplished households [17, 20]. Finally, contrary to the results of a research by Kim Seow [17], our investigation has indicated a negative statistical significance between age group, number of children, monthly income level, and total knowledge connected to oral health.

### CONCLUSION:

Study results showed that most of study participants reported the importance of dental care and were aware

of oral hygiene practices. Participants of the current study did yearly check-ups with the dentist. The most frequent reason for not visiting the dentist was high cost. Participants received dental education on yearly basis.

### REFERENCES:

1. Leghari MA, Farzeen T, Ali H. Association of dental caries and parents knowledge of oral health, A cross-sectional survey of schools of Karachi, Pakistan. *J Pak Dent Assoc.* 2014;23:19–24.
2. Suma G, Anisha P. Evaluation of the Association of Parent's Oral Health Knowledge and Development of Dental Caries in their Children. *Austin J Dent.* 2017;4(07):1092.
3. Saldūnaitė K, Bendoraitienė EA, Slabšinskienė E, Vasiliauskiene I, Andruškevičienė V, Zūbienė J. The role of parental education and socioeconomic status in dental caries prevention among Lithuanian children. *Medicina.* 2014 Jan 1;50(3):156-61.
4. Abanto J, Paiva SM, Raggio DP, Celiberti P, Aldrigui JM, Bönecker M. The impact of dental caries and trauma in children on family quality of life. *Community Dentistry and oral epidemiology.* 2012 Aug;40(4):323-31.
5. Gao X, Lo EC, McGrath C, Ho SM. Innovative interventions to promote positive dental health behaviors and prevent dental caries in preschool children: study protocol for a randomized controlled trial. *Trials.* 2013 Dec;14(1):1-8.
6. Borges HC, Garbín CA, Saliba O, Saliba NA, Moimaz SA. Socio-behavioral factors influence prevalence and severity of dental caries in children with primary dentition. *Brazilian oral research.* 2012;26:564-70.
7. Castilho AR, Mialhe FL, Barbosa TD, Puppini-Rontani RM. Influence of family environment on children's oral health: a systematic review. *Jornal de pediatria.* 2013;89:116-23.
8. Kumar R. *Research methodology: A step-by-step guide for beginners.* Sage; 2018 Dec 10.
9. Mangal SK, Mangal S. *Research methodology in behavioural sciences.* PHI Learning Pvt. Ltd.; 2013 Aug 22.
10. Kagihara LE, Niederhauser VP, Stark M. Assessment, management, and prevention of early childhood caries. *J Am Acad Nurse Pract.* 2009;21(1):1–10.
11. American Academy of Pediatric Dentistry. *Pediatr Dent.* 2008;30:40–43. American Academy of Pediatrics, American Academy of Pediatric Dentistry Council on Clinical Affairs. Policy on

- early childhood caries (ECC): classifications, consequences, and preventive strategies.
12. Skrīvele S, Care R, Bērziņa S, et al. Caries and its risk factors in young children in five different countries. *Stomatologija*. 2013;15(2):39–46.
  13. Beal JF, Dickson S. Parental awareness of the dental needs of 5-year-old children in the West Midlands, England. *Community Dent Oral Epidemiol*. 2014;2(3):91–94.  
doi: 10.1111/j.1600-0528.1974.tb01664.x. DOI:
  14. Nuhu A, Sheikh Mohammad A, Naima N, et al. Evaluation of dental caries awareness among the parents of school going children in Dhaka city. *Bangladesh Dental College J*. 2011;2:21–26.
  15. Moimaz SA, Fadel CB, Lolli LF, et al. Social aspects of dental caries in the context of mother-child pairs. *J Appl Oral Sci*. 2014;22(1):73–78.
  16. Gao XL, Hsu CYS, Xu Y. Building caries risk assessment models for children. *J Dent Res*. 2010;89(6):637–643.
  17. Kim Seow W. Environmental, maternal, and child factors which contribute to early childhood caries: a unifying conceptual model. *Int J Paediatr Dent*. 2012;22(3):157–168.
  18. Alshammari FS, Alshammari RA, Alshammari MH, Alshammari MF, Albrahim AK, Alkurdi KA, Alshammari AF. Parental awareness and knowledge toward their children's oral health in the city of Dammam, Saudi Arabia. *International Journal of Clinical Pediatric Dentistry*. 2021 Jan;14(1):100.
  19. Suresh BS, Ravishankar TL, Chaitra TR, et al. Mother's knowledge about pre-school child's oral health. *J Indian Soc Pedod Prev Dent*. 2010;28(4):282–287.
  20. Azevedo MS, Romano AR, Dos Santos Ida S, et al. Knowledge and beliefs concerning early childhood caries from mothers of children ages zero to 12 months. *Pediatr Dent*. 2014;36:95–99.