

Parent's Attitude toward Use of Internet for Child's Bruxism Habit

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ABSTRACT

The aim of this study is to determine the understanding regarding parent's attitude towards use of the internet for child's bruxism. The purpose of this study is to create awareness and determine the understanding of the parent's attitude towards use of the internet for child's bruxism. This study was conducted based on a questionnaire which consists of 10 questions through a web-linked application called Google Form. A convenient sample size of 100 consecutive parents who visited Saveetha Dental College participated in the study. As an overall result, most of the participants have a positive attitude regarding information on the internet. As a conclusion, awareness on the parent's attitude towards use of the internet for child's bruxism in Chennai had to be increased and adequate knowledge had to be brushed up among them for a better understanding regarding this topic. Furthermore, they need to be trained on these grounds to help them be more disciplined and more consent with oral health issues.

KEYWORDS: internet; bruxism; awareness; parents; treatment; information

INTRODUCTION

Bruxism is a disease that is characterized by clenching and/or grinding the teeth and affects both children and adults.(Buysse et al. 2003) Teeth grinding commonly occurs during sleep, whereas teeth clenching is more common while awake during periods of worry, stress, and excitement, and is accompanied by a noticeable noise.(Katayoun et al. 2008) The mouth is regarded as the mirror of the body and a gateway to good health. Bruxism is an important aspect of general health in children as it impacts the quality of life and health outcomes. WHO presented bruxism of 51.9%, 58.3%, and 63.1% among 5, 12, and 15 years children, respectively, indicating oral health burden.(Bader and Lavigne 2000) Challenge comes in treating these children because of the dental procedures fear, making them uncooperative. This fear and anxiety among children tend them to delay dental treatment in every possible way, thereby deteriorating their own oral health.(Cheifetz et al. 2005)

Different etiological factors, such as local, systemic, psychological, occupational, and hereditary factors, can be associated with the development of sleep disorders.(Junia M. Serra-Negra et al. 2009)The most common signs and symptoms are tooth wear, disorder in the support structures of the dental arches, pulpal hypersensitivity, tooth mobility, fractured cusps and restorations, pain, temporomandibular disorder, hypertrophy of the masseter muscle and headaches.(Restrepo et al. 2008)Detailed anamnesis as well as clinical intra and extraoral examinations are indispensable in determining a diagnosis of bruxism. In terms of the damage caused by the disease, three

characteristics must be observed: The persistence of the habit, the intensity of the habit, and the duration of the periods of clenching and/or grinding.(Moore et al. 2011)Childhood bruxism may persist into adulthood. Early diagnosis helps to provide a perspective of control, prevents damage to the components of the masticatory system, and promotes well-being and comfort.(Wang et al. 2013)

It is essential, therefore, that parents seek help as soon as the abnormality has been identified. The participation of parents is fundamental as they can inform the medical history and current medical state of the child and other family members.(Júnia Maria Serra-Negra et al. 2012)The damage later drives beyond oral health and starts affecting daily activities of life, creating a negative psychosocial impact.(Diniz, Silva, and Zuanon 2009) Awareness among children can help tackle this issue at a very young age. Early the habits inculcated better would be the foundation for healthy permanent dentition. However, growing children need proper guidance for their healthy growth. Preventive of bruxism should start early in infancy during the first year of a child's life to ensure a successful outcome.(Emodi- Perlman and Eli 2012)

Parents guide children in proper oral habits and promote healthy dietary habits in them and also seek professional dental care. In the field of dentistry, most myths lead the patients to a wrong protocol, which in term can lead the dentist to a state where it is difficult to provide proper and satisfying treatment.(Soares et al. 2020) In many countries of the world, the old traditions (myths) are being followed ardently. Children usually have high prevalence of oral habits such as bruxism. A previous study reported a high prevalence of oral habits among Indian children where 52% of 12-year-old children in Chennai, India had dental caries.(Junia Maria Serra-Negra et al. 2013) When children are young, decisions are predominantly made by parents or caregivers because children's decision-making abilities are not adequately formed.(Restrepo et al. 2001) At this developmental stage, behavior modification is important to foster proper self-care habits that can help reduce oral diseases and hopefully last throughout life.(Abe and Shimakawa 1966)

Using social media is one of the most common activities of today's parents. Websites that allow social interaction are considered social media platforms, allowing users to communicate, develop their creativity, expand their knowledge and obtain health information.(Grewal and Kaur 2007) Searching for health information online may make users feel more secure in expressing their primary concerns because their identities are masked and their privacy is guaranteed and users can engage with content generated by others.(Mani et al. 2010) Health information can be disseminated through a variety of forms over social media such as blogs, podcasts, tweets, Facebook pages or posts, and YouTube videos. Thus, the internet may offer an opportunity to disseminate bruxism targeting Indian parents. Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Duraisamy et al. 2019; Ariga et al. 2018; Kannan and Venugopalan 2018; Basha, Ganapathy, and Venugopalan 2018; Rajakeerthi and Ms 2019; Teja, Ramesh, and Priya 2018; Menon et al. 2018; Siddique et al. 2019; Nandakumar and Nasim 2018; Manohar and Sharma 2018; Hema Shree et al. 2019; Rajendran et al. 2019; Gheena and

Ezhilarasan 2019; Hussainy et al. 2018; Hannah et al. 2018; Sharma et al. 2019; Ravinthar and Jayalakshmi 2018; J. Jose, Ajitha, and Subbaiyan 2020; Sekar et al. 2019; D. Kumar and Antony 2018; Johnson et al. 2020; Janani, Palanivelu, and Sandhya 2020; Seppan et al. 2018; Jeevanandan and Govindaraju 2018; Nandhini, Babu, and Mohanraj 2018; Karpagam and Mathew 2020; E. J. A. Jose et al. 2020; Madhavan and Mathew 2019; Nagaveni et al. 2017; Samuel and Mathew 2019; Jitesh and Mathew 2019; Mathew et al. 2020). Therefore, this study is aimed to evaluate the parental attitude toward the use of the internet related to child's oral health and treatment in Chennai.

METHODS AND MATERIALS

A convenience sample size of 100 consecutive parents who came to Saveetha Dental College, regarding the bruxism habit of their child. A cross-sectional observational online based study was conducted. Questionnaire was constructed on the Google Form website with demographic details and dichotomous responses (Yes, No, I don't know). The questionnaire consists of 10 questions as shown in Table 1. A link containing these questionnaires was shared with all the participants and required them to answer the questions. All the responses were analysed and recorded.

QUESTIONS
Q1. Have you ever searched information about your child's bruxism habit on the internet?
Q2. Have you searched for information related to bruxism before consulting a doctor?
Q3. Will you discuss a treatment plan to your doctor searching from the internet?
Q4. Will you decide your own treatment from the internet for bruxism issues for your child?
Q5. Taking medicines after searching on the internet instead of getting a doctor's prescription?
Q6. Suggesting internet usage for treatment options with friends and colleagues?
Q7. Do you think that awareness regarding harmful effects of internet information needs to increase?
Q8. Have you ever found information from the internet useful regarding your child's bruxism?
Q9. Are you satisfied with the practise of searching information (child's bruxism) on the internet?
Q10. Does the treatment plan form the internet cause the bruxism of your child better?

Table 1: shows the questions asked in the questionnaire regarding parents KAP of internet usage for children's bruxism habit.

RESULTS

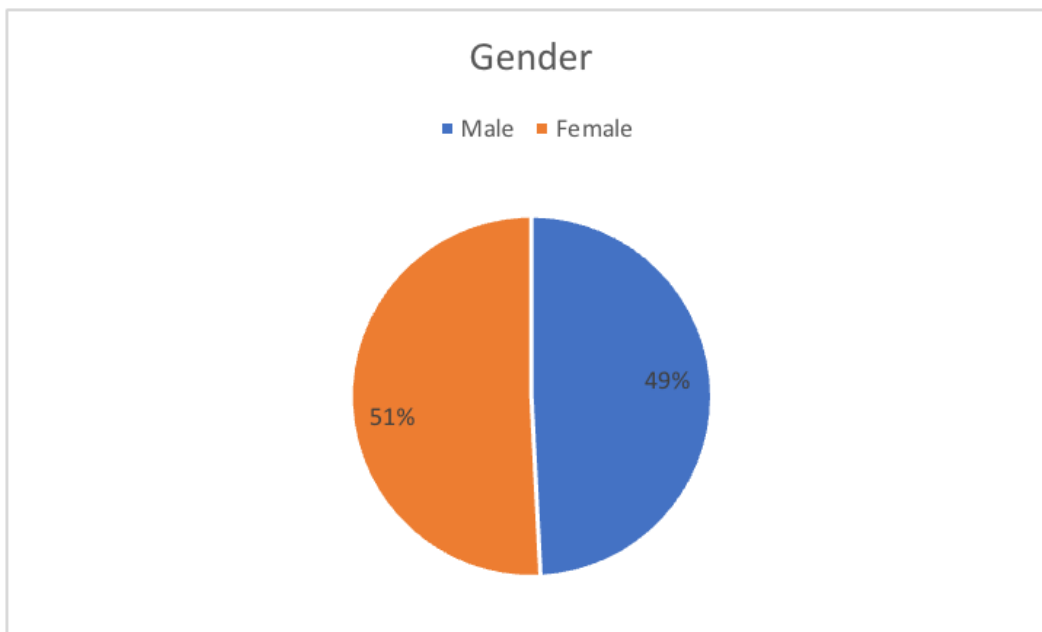


Figure 1 shows the percentage of gender of participants



Figure 2 shows the percentage of employment status of participants

AGE RANGE	15-19 years old [Adolescence]	1%
	20-39 years old [Early Adulthood]	56%
	40-59 years old [Middle Adulthood]	39%

	60 and above [Late Adulthood]	4%
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Table 2 shows the percentage of age range of the participants

EDUCATIONAL STATUS	Did not complete school	3%
	Completed school	16%
	Undergraduate student	10%
	Completed undergraduate	41%
	Postgraduate student	10%
	Completed post-graduation	20%

Table 3 shows the percentage of education status of participants

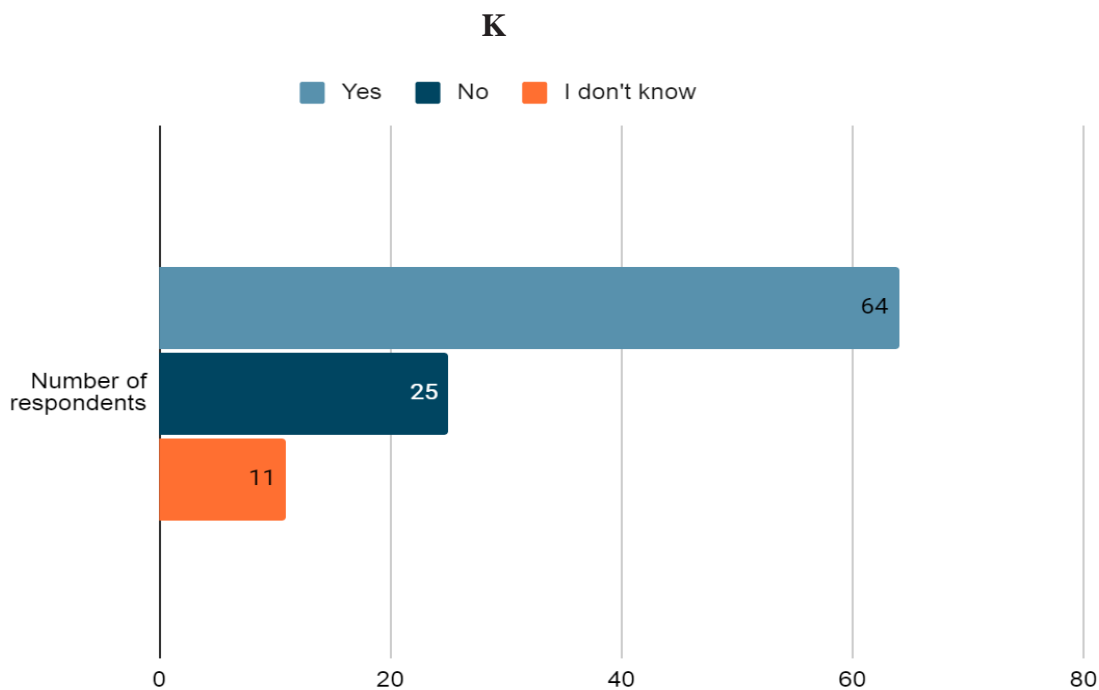


Figure 3 shows the response from participants regarding information gathering through the internet for child’s bruxism.

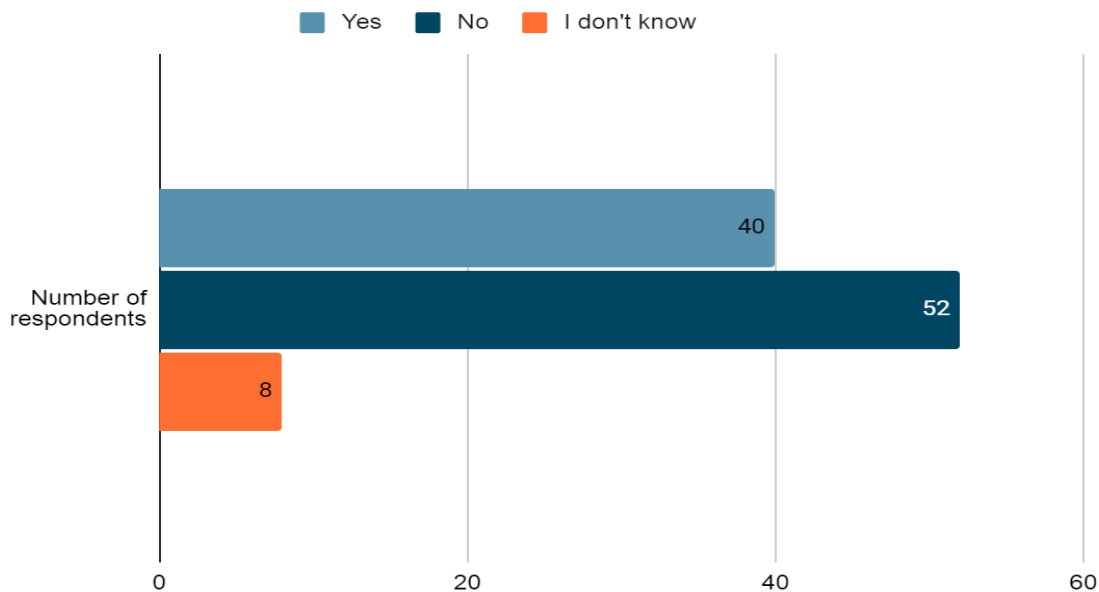


Figure 4 shows the response of participants regarding usage of internet information before a doctor's consultation

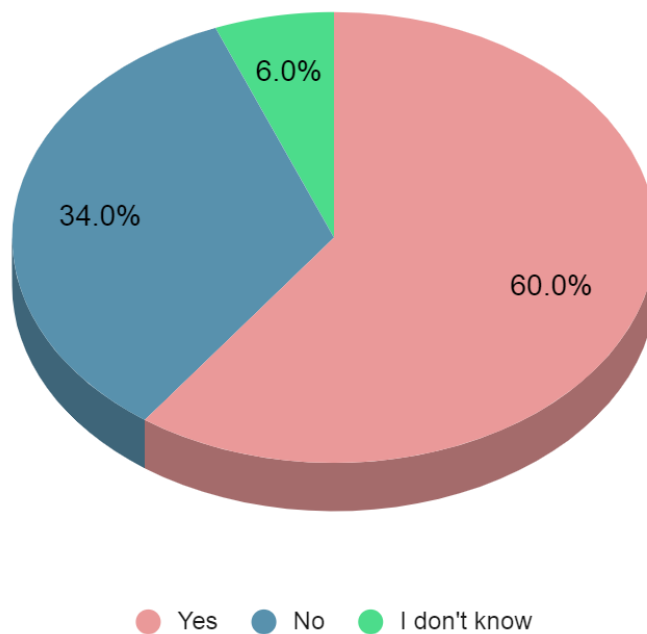


Figure 5 shows the percentage of participants responded to a question asked regarding discussing internet informations to doctor

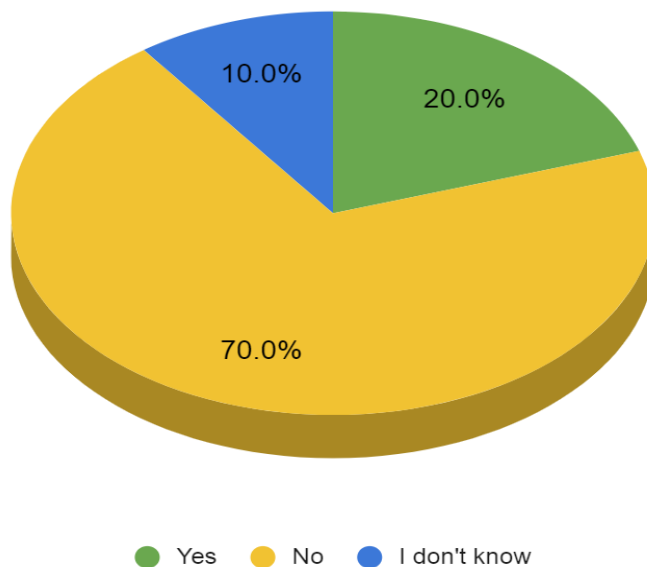


Figure 6 shows the response regarding deciding a own treatment plan for their child without consulting a doctor

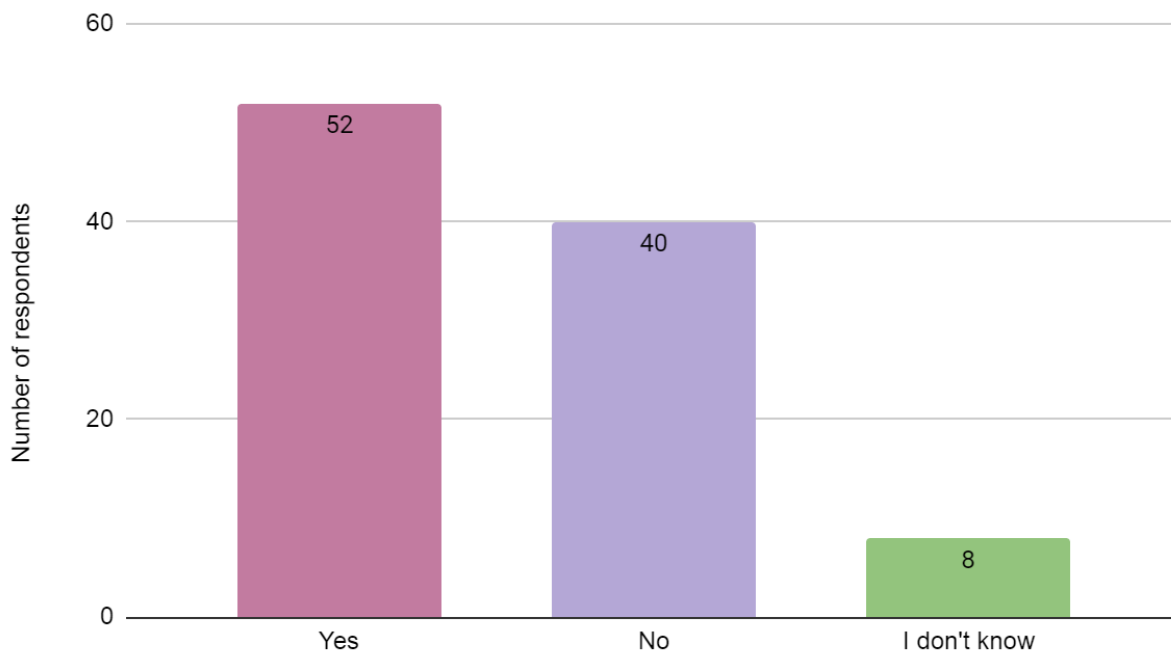


Figure 7 shows the response of participants regarding intake of medication without a doctor's prescription

Question	Yes (%)	No (%)	I Don't Know (%)
Suggesting internet usage to friends and colleagues	60	37	3
Increasing awareness of harmful effects of internet information	80	10	10
Ever found internet information useful for bruxism habit of child	37	53	10
Satisfaction of information gathered on the internet	23	64	13
Have bruxism habit get better after following internet information	4	92	4

Table 4 shows the remaining response of the participants regarding internet information on bruxism habit in their child

Based on the demographic results obtained from the study, almost equal percentage of male(49%) and female(51%) had participated in this study. This result can be seen in Figure 1. Figure 2 explains about the employment status of the participants. It showed that about 73% of them were employed and the remaining 27% of them were not employed. According to Table 2, the category of participants based on age were high among those who are between 20-39 years old which is the early adulthood(56%). The lowest age category was 15-19 years old(1%). The highest number of participants were those who had completed their under graduation(41%), as shown in table 3 which elaborated the education status of participants. These were followed by postgraduates(20%), undergraduate students(10%), those who have only completed school(16%), postgraduate students(10%) and those who did not complete schools(3%).

According to Figure 3, about 64% of the participants claimed that they had searched information about their child's bruxism habit on the internet. However, 25% of the participants did not do as such and the remaining 11% of them had no clues about it, where they chose the option 'I don't know'. Figure 4 explained that about 40% of the participants searched information regarding treatment of bruxism before consulting a doctor. Remaining 52% and 8% of the participants did not search treatment information for bruxism before consulting a doctor and have no clues about this topic, respectively. 60% of the participants agreed that they would discuss the treatment plan that they searched online to their doctor, whereas 34% of them claimed that they would not do that. However, the remaining 6% of them chose the 'I don't know' option, as shown in Figure 5. Figure 6 showed the question asked about whether a own treatment plan will be decided by the parents regarding their child's bruxism habit without consulting a doctor. About 70% of them disagreed with the statement whereas 20% of them have claimed that they tend to do so. Figure 7 explained that about 52% of the participants claimed that they will give medicines to their child in regards to online searched information instead of consulting a doctor. However, 40% of them disagreed with it and the remaining 8% of them chose the 'I don't know' option. Table 4 showing responses for remaining questions. It showed that awareness regarding harmful effects

caused by internet information has to be increased. And it also explained that the majority(92%) of them had not found that bruxism got better in their child after following internet information.

DISCUSSION

Google was the most popular internet platform for bruxism information in the present study. This agrees with another study where the role of Google as a search engine was reported to be particularly important because Google actively mediates and shapes the information seen by its users.(Gao et al. 2013) Previous research showed that search engines such as Google offered a variety of content and had minimal advertisements. Information provided through Google can be checked through its preview feature without the need to visit the original website, thus allowing users to skim through information directly.(Duijster et al. 2015) The present findings agree with Fan et al. who reported that adult users searched Google more for child's dental problem information than for self dental problems.(Shivaprakash et al. 2009) Google has shown how the pervasive internet, connectivity, big data analytics and artificial intelligence can be used to dissolve boundaries and constraints, learn more about their behaviors and preferences, and deliver highly personalized experiences and products in sustainable and cost-effective ways.(Brena and Chapman 2012)

Previous literature showed that usage of the internet for oral health of children was directly associated with bruxism. This may suggest that searching for bruxism over the internet is more frequent among those who already have a child or by a caretaker of small children.(Fan et al. 2019) The findings also showed that searching bruxism was inversely associated with regular dental visits.(Elena Renda et al. 2015) This may be attributed to the availability of oral health through the dentist during these visits which reduces the need for searching for answers to questions about the internet.(Jamnadass et al. 2018)

A study by Kumar et al.,(G. Kumar et al. 2020) examined internet use by a diverse group of people reported for dental treatment as a resource for procuring information on oral health. It was reported that around 56.1% of the participants had access to the internet and they use the internet to gather information on oral health, whereas only 41.9% reported that they have access to the internet but do not use it to search information related to oral health and disease. This is similar to the study conducted by Gordon et al.,(Gordon, Capell, and Madhok 2002) where 83% of the participants searched information on arthritis. This was in contrast to the study conducted by Kanduluru et al.,(Kanduluru et al. 2019) in which only 25% reported the use of the internet for information on oral health.

CONCLUSION

The results of the present study showed that the knowledge and awareness level of the participants was inadequate and accessing information from the internet associated with dentistry was more prevalent in this digital era. However, more studies are required to accumulate valuable data related to the oral practices and internet based information regarding

bruxism in the country. Also, decoding of the myths on the internet is required by the dentist in order to provide successful dental treatment and in order to prevent many dental problems.

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