Prevalence and awareness regarding dental problem in school children at Jeddah City, KSA

Corresponding Author:

Dr. Abdullah AlGhtany

Dr.abdullah.07@hotmail.com

King Fahad Army Forced Hospital, Jeddah

Co- authors:

Basoum ashour, Lama alhalees, Saif alyamani, Nazneen Mushtaq

Abstract:

Dental caries is the most prevalent chronic disease affecting humans irrespective of age, sex, race and socioeconomic status. As around 90% of school children and most of the adults have been affected by dental caries, hence it has been considered as the most important global oral health burden . Epidemiological surveys are important for monitoring trends in dental caries and for assessing the dental needs.

Methods:

School children's visited Primary care health care center during the study period (Jan-2019-March-2019) of Jeddah city under 12 years of age were included in this study. Written consent was taken from them. A purposely constructed questionnaire was used to collect the data. SPSS ver.20 was used for analysis. Chi-square and t - test was used for analysis at 5% level of significance.

Results:

Total students included in this study was 178 with mean ± s.d was 7.5 ± 3.8 , 85% were aware about the dental problems.

Conclusion:

Need of reforms in dietary and brushing habits required

Key Words:

Brushing habits, dietary, prevalence, pedia.

Introduction:

Dental caries is the most prevalent chronic disease affecting humans irrespective of age, sex, race and socioeconomic status [1]. As around 90% of school children and most of the adults have been affected by dental caries, hence it has been considered as the most important global

oral health burden [2]. Epidemiological surveys are important for monitoring trends in dental caries and for assessing the dental needs [3].

The oral health of children 12-year-old is the object of several epidemiological studies conducted around the world. According to the World Health Organization (WHO, 2013) the importance given to this age group is because it is the age that children leave primary school. Thus, in many countries, it is the last age at which data can be easily obtained through a reliable sample of the school system. Moreover, it is possible that at this age, all the permanent teeth except third molars have already erupted. Thus, the age of 12 was determined as the age of global monitoring of caries for international comparisons and monitoring of disease trends. [4-6]

There is a high prevalence of dental caries worldwide involving the people of all region and society, voluminous literature exists about dental caries levels in Indian population. Geographical location plays a great role in caries prevalence; it varies with the change in location. According to the National Oral Health Survey Report 2004. [7-9]

Dental caries is an infectious disease that causes demineralization of teeth. The association of four aspects accords this to occur: a susceptible tooth surface, specific bacteria in dental plaque, duration and a rich diet in fermentable carbohydrates, mainly refined sugars.

The unhealthy practice of children often leads to many medical problems some of which can cause permanent damage. If dental caries develops after the eruption of permanent dentition and proper care is not taken it may lead to permanent damage and spread of infection throughout the body can also occur. Utmost care must thus be taken so that dental caries should not develop. Early diagnosis with prompt treatment is also necessary.[10-11]

Dental caries is a major oral health problem affecting 2.43 billion people (35.3% of the population) worldwide in the year 2010 . A high burden of dental caries was evident among children in Saudi Arabia with an estimated prevalence of approximately 80% ; other high-risk areas include Latin America, Middle East, and South Asia . The World Health Organization (WHO) emphasizes the need to reduce global burden of dental caries in attaining optimal health. Consequently, in the year 2003, WHO and Fédération Dentaire Internationale (FDI) World Dental Federation set global goals for oral health in 2020 to guide planners and policy makers to improve the status of oral health in their populations [4]. Unfortunately, knowledge gaps with respect to the availability of baseline data on oral health and population-specific key modifiable factors of dental caries restrict the ability of many developing nations and semi-developed countries, including Saudi Arabia to attain the goals set by WHO. In addition, competing interests in health care funding warrant prioritizing the associated factors to better direct public health mitigation efforts.[12-16]

The main aim of this study is to find out the prevalence of awareness regarding dental problem among the school children of Jeddah city.

Methods:

School children's visited Primary care health care center during the study period (Jan-2019-March-2019) of Jeddah city under 12 years of age were included in this study. Written consent was taken from them. A purposely constructed questionnaire was used to collect the data. SPSS ver.20 was used for analysis. Chi-sqaure and t - test was used for analysis at 5% level of significance.

Results:

Total students included in this study was 178 with mean ± s.d was 7.5 ± 3.8

Figure 1 depicted that 85% were aware about the dental problems

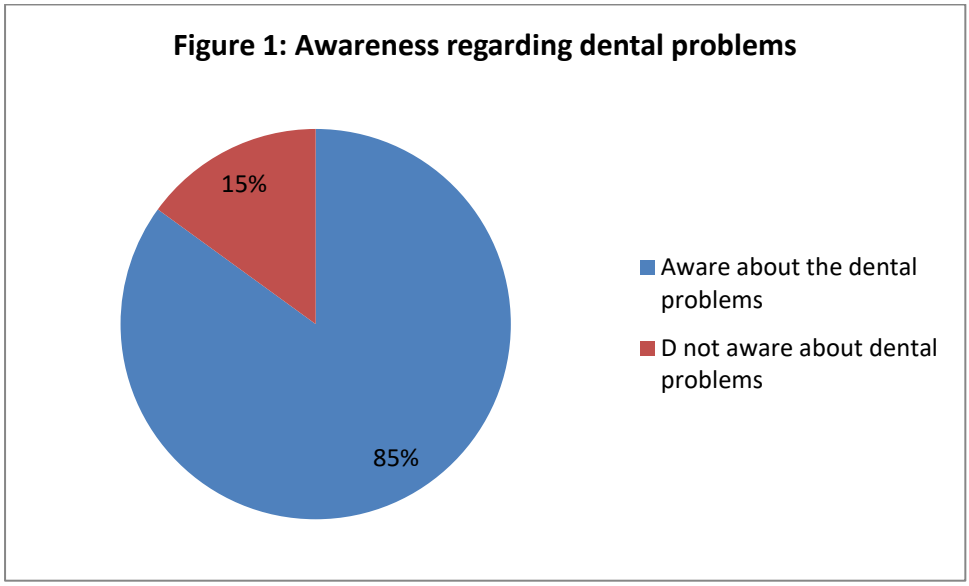

Figure 2 depicted that 40% hade the problem of yellow teeth, 25% have problem of pain and tooth decay while 10% have other problems

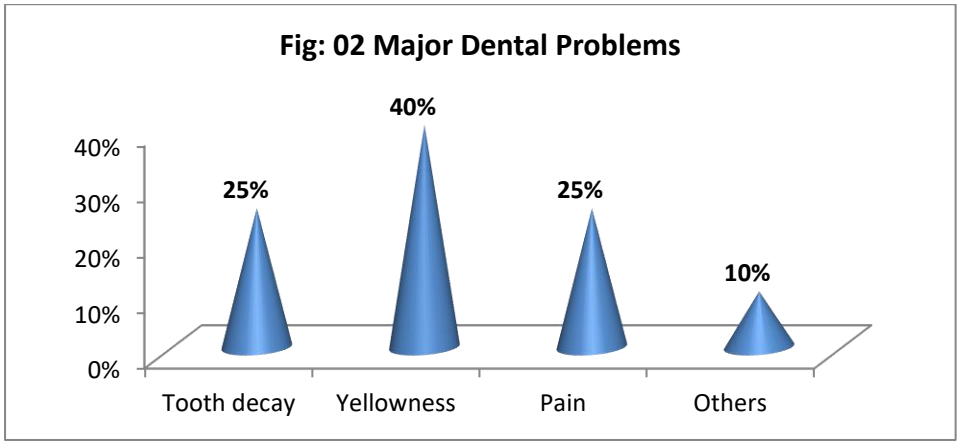

Table 1 Age Distribution with awareness:

Age Group in Years	Aware	Not Aware
1-5	40%	8%
6-11	45%	7%
p=0.45		

Table 1 Stated that we did not observed the significant difference between age groups regarding dental awareness.

Table 2: Habits

Brushing Habits	
1 times	55%
2 times	25%
3 times	17%
more than 03	3%
No. of Meals / Day	
2	35%
3	45%
4	11%
more than 4	9%
Fast Food/ week	
No	25%
Yes	75%

Table 2 depicted that 55% were brushing their teeth's only one time, 45% have 3 meals / day while 75% eating fast food / week.

Discussion:

The problem of dental caries is high in Saudi Arabia with eight out of ten primary school children aged 5–11 years suffering from this preventable condition. Several individual factors encompassing three risk domains, including oral health behaviors and practices. In recent era there is a great need to make the students aware regarding the dental problems . In our study that 85% were aware about the dental problems which is inline with Riyadh based study . In Riyadh base study almost 80% were suffering from the dental carries. Asked about students habits of brushing the teeth and it was observed that those who used to brush twice a day had less prevalence of dental caries as compared to those whose brushing habit are either once daily or not every day. It was reported that in Kenya that brushing habit has no significant effect on the dental carries prevalence which is contradictory to the results of present study. However in other study found that 24% children had the brushing habit more than once a day and overall prevalence of dental caries is less in their study as compared to the present

study.14 Dental caries is not only a medical problem but also a social problem. Dental caries would be prevented by appropriate hygienic ways. Dental awareness among students and their parents should be prompted for prevention of this condition. Prompt diagnosis and early treatment would prevent additional impairment and save the teeth. Dental and nutritive habits are likely to increase this prevalence; therefore the need for continuous monitoring, protecting and curative programmes.

Dietary habits, such as fast food habits (more than once a week), were significantly associated with dental caries in our study.

The high prevalence of dental awareness observed among primary school children in our sample was consistent with previous studies in Saudi Arabia [17-22]

Conclusion: Need of reforms in dietary and brushing habits required

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