Original Research Article

Knowledge, attitude and practice regarding oral health among secondary school students in Kulgam district, J&K

Mudasir Gani[1*], Rezhat Abbas[2], Munaza Rashid[3]

[1]Postgraduate scholar, Department of Periodontics & Oral Implantology, Govt. Dental College & Hospital, Srinagar, J&K-UT, India
[2]Postgraduate scholar, Department of Oral Pathology & Microbiology, Govt. Dental College & Hospital, Srinagar, J&K-UT, India
[3]Postgraduate scholar, Department of Orthodontics, Himachal Dental College, Sundarnagar, Himachal Pradesh, India
[*]Corresponding author email: **mudasirgani48@gmail.com**

International Archives of Integrated Medicine, Vol. 10, Issue 2, February, 2023.
Available online at http://iaimjournal.com/
ISSN: 2394-0026 (P) **ISSN: 2394-0034 (O)**
Received on: 2-2-2023 **Accepted on:** 18-2-2023
Source of support: Nil **Conflict of interest:** None declared.

How to cite this article: Mudasir Gani, Rezhat Abbas, Munaza Rashid. Knowledge, attitude and practice regarding oral health among secondary school students in Kulgam district, J&K. IAIM, 2023; 10(2): 22-27.

Abstract

Background: Oral health is a primary division of overall health. Oral health knowledge is considered to be crucial for developing healthy behaviors, and it has been shown that there is an association between increased knowledge and better oral health. Optimum health related practices are more likely to be taken up if an individual feels a sense of better control over their health with better understanding of diseases and their etiology.
Aim: Therefore, the present study aimed at assessing the level of oral health knowledge, attitude and practices of secondary school students in district Kulgam, Jammu & Kashmir UT.
Materials and methods: A cross-sectional survey was conducted among 384 secondary school students of Kulgam district J&K. The participants were presented with a standardized pre-tested closed ended questionnaire based on WHO oral health questionnaire for children. It was a multiple choice questionnaire where the participants were asked to select the most relevant answer.
Results: This study showed that knowledge and attitude towards oral health hygiene was good among the students. Attitude towards oral health was also found to be comparatively good. Oral hygiene practices were not up to the mark. There is a need to teach the significance of routine dental checkup, appropriate tooth brushing technique and material used for tooth brushing.

Conclusion: School age is the right time when the behavior can still be molded, secondary level students would be the appropriate target group to receive the first organized intervention leading towards correct knowledge along with a positive attitude which is essential to bring about a change in their oral health behavior.

Key words

Knowledge, Attitude, Practice, Oral health, Secondary school students.

Introduction

Oral health is a primary division of overall health. As the oral cavity is the doorway for the human being body, any damage to oral health can be evident not only in the oral cavity but also in other parts of the body [1].

Oral disease is health problem of considerable burden which often leads to pain and more significantly tooth loss; a condition that affects the appearance, quality of life, nutritional intake and consequently the growth and development. Dental caries and periodontal disease are amongst the most widespread oral conditions in human population, affecting from about 67.5% to over 80% of school children in some countries which amounts to a great health burden. Fortunately, many of the oral health problems are preventable and their onset is reversible [2].

Oral health knowledge is considered to be crucial for developing healthy behaviors, and it has been shown that there is an association between increased knowledge and better oral health. Optimum health related practices are more likely to be taken up if an individual feels a sense of better control over their health with better understanding of diseases and their etiology. In recent years, throughout the world there has been an increased emphasis on the educational approach in the prevention and control of health problems. But imparting knowledge through health promotional programs in a developing country like India, with its second largest population in world and meager economic and health care resources to cater its rapidly growing population, is a difficult task. Schools have great and lifelong influence on child's development and well-being. Children can be provided with knowledge that helps them in making better choices, adopting healthier lifestyle and to deal with conflicting ideas [3].

Students are the ideal target group for an early intervention because healthy behaviors and lifestyles developed at younger ages are more sustainable. However, it has been seen in many developing countries that children have limited knowledge of the causes and prevention of oral disease [4]. Very few studies have been done to assess the level of oral health–related knowledge and the attitudes and practices of children in India [3] and none in Kulgam, J&K as per the knowledge of the authors. Therefore, the present study aimed at assessing the level of oral health knowledge, attitude and practices of secondary school students in district Kulgam, Jammu & Kashmir UT.

Materials and methods

A cross-sectional survey was conducted among 384 secondary school students of Kulgam district J&K. The participants were presented with a standardized pre-tested closed ended questionnaire based on WHO oral health questionnaire for children. A pilot study was conducted earlier on 20 young adults to check the validity and comprehensibility of the questionnaire. The results of the pilot study showed an acceptable clarity of the questionnaire and henceforth no editing was done. The questions were in the local dialect and English. It was a multiple choice questionnaire having the questions to assess knowledge, attitude & oral health practices, where the participants were asked to select the most relevant answer.

Results

Table - 1 depicts the oral health knowledge among participants. It was found that students had good knowledge about oral health. **Table - 2** shows the attitudes towards oral health among participants, and **Table - 3** shows the oral hygiene practices among the participants.

Table – 1: Oral Health Knowledge among Participants (n = 384).			
Dental caries caused by	Bug (200) [52%]	Improper brushing (84) [21%]	Sweets (100) [26%]
Fluoride added to toothpaste	Cheap (50) [13%]	Improves taste (54) [14%]	Makes teeth resistant to caries (280) [73%]
Smoking affects dental health	Yes (250)[65%]	No (34) [08%]	Don't know (100) [26%]
Impact of oral health on health of body	Yes (100) [26%]	No (100) [26%]	Don't know (184) [47%]
Alcohol affect oral health	Yes (360) [93%]	No (24) [07%]	Don't know
Paan/ tobacco chewing affect oral health	Yes (380) [99%]	No (4) [01%]	Don't know
Tooth decay avoidable	Yes (200) [52%]	No (84) [21%]	Don't know (100) [26%]
Thumb sucking affect teeth	Yes (100)[26%]	No (84) [21%]	Don't know (200) [52%]
Mouth breathing affects teeth	Yes (100)[26%]	No (100) [26%]	Don't know (184) [47%]
Nail biting affect teeth	Yes (84)[22%]	No (100) [26%]	Don't know (200) [52%]
Maligned teeth affect oral health	Yes (84)[22%]	No (100) [26%]	Don't know (200) [52%]
Care of teeth necessary	Yes (300) [78%]	No (84) [21%]	Don't know
Important to choose right tooth brush	Yes (350)[92%]	No (34) [08%]	Don't know
Regular dental check-up necessary	Yes (300) [78%]	No (34) [08%]	Don't know (50) [13%]

Table – 2: Attitude among Participants towards Oral Health (n=384).			
Caring of our mouth is as important as caring of other parts of body	Yes (250) [65%]	No (100) [26%]	Don't know (34) [08%]
Good oral health related to good general health	Yes (300) [78%]	No (50) [13%]	Don't know (34) [08%]
We should use our own tooth brush while brushing	Yes (300) [79%]	No (60) [15%]	Don't know (24) [06%]
Using same toothbrush for a long period is bad for our dental/oral health	Yes (250) [65%]	No (40) [10%]	Don't know (94) [25%]
Regular visit to the dentist is necessary for better oral/dental health	Yes (320) [83%]	No	Don't know (64) [17%]
Gutka/Paan/Supari/Tobacco chewing/Smoking is bad for oral health	Yes (380) [99%]	No	Don't know (4) [01%]

Discussion

Oral health which is an integral part of general health may be defined as "standard of health of the oral and related tissues which enables an individual to eat, speak, and socialize without active disease, discomfort, or embarrassment and which contributes to general well-being [5]." Present investigation aimed to provide a comprehensive overview of the oral health

behavior, knowledge and attitudes among secondary level school students of Kulgam, which can help the planning and evaluation of the oral health promotion program in this region.

Table – 3: Oral Hygiene Practice among Participants (n=384).

Frequency of Brushing	Once a day (250) [65%]	Twice a day (90) [23%]	Occasionally (40) [11%]	Never (4) [01%]
Habit of Using other's Brush	Most of the time (24) [06%]	Sometimes (50) [13%]	Never (300) [78%]	
Method of Brushing	Circular (100) [26%]	Horizontal (120) [31%]	Vertical (80) [21%]	Mixed (84) [22%]
Type of brush	Hard (40) [10%]	Medium (100) [26%]	Soft (200) [52%]	Ultra soft (44) [12%]
Prefer time for Brushing	Morning only (280) [73%]	Morning and night (80) [21%]	After each meal (24) [06%]	
Time spent for Brushing	Less than 3 minute (290) [75%]	3-5 minute (80) [21%]	More than 5 minute (14) [04%]	
Rinsing Habit after meal	Yes (280) [73%]	No (104) [27%]		
Material use for cleaning teeth (except brushing)	Dental floss (60) [15%]	Mouth fresher (20) [06%]	Tooth pick (190) [49%]	None (114) [30%]
Changing a brush	Once every 3 months (100) [26%]	Once every 6 months (200) [52%]	Once a year (84) [22%]	
Routine Dental Checkup	Never (40) [11%]	0-6 months (80) [21%]	7-12 months (100) [26%]	More than a year (164) [42%]
Gutka/Pinky/Paan/Madhu /Suparichewing habit	Often (4) [01%]	Sometimes (10) [03%]	A lot	Never (370) [96%]
Chocolate Consuming Habit	Often (290) [75%]	Sometimes (60) [15%]	A lot (34) [10%]	Never
Toothpaste type	Fluoridated (285) [74%]	Non-fluoridated (99) [26%]		

This study showed that knowledge and attitude towards oral health hygiene is good among the students. However few questions were not answered correctly by most of the participants like questions regarding thumb sucking, mouth breathing, nail biting and misaligned teeth. This shows that there is a need to improve the basic knowledge about parafunctional habits among children. Attitude towards oral health was also found to be comparatively good. Oral hygiene practices were not up to the mark. There is a need to teach the significance of routine dental checkup, appropriate tooth brushing technique and material used for tooth brushing. This survey found that a high percentage of the children in this study brush their teeth at least once daily or twice daily. There is consensus in literature that meticulous tooth brushing once per day is sufficient to maintain oral health and prevent caries and periodontal diseases. But most of people are not able to achieve optimum plaque removal. Therefore, tooth brushing twice daily is recommended by most dentists in order to improve plaque control. The use of other recommended oral hygiene methods such as dental floss and mouthwashes was found to be

rare. The findings are in concurrence with Al-Omiri, et al. [6], Mathur and Gupta [7] and could be attributed to the lack of oral health education, the cost of such aids socioeconomic status, parental influences or traditional/ religious beliefs of the population concerned. On the knowledge on how the teeth should be properly brushed, majority of the respondents used a non-directed brushing method with a combination of brushing strokes. Thus there is need to educate school children on the correct motion for teeth brushing to ensure that the teeth are thoroughly brushed which h will reduce or eliminate the chance of oral diseases. Our findings were consistent in most part with Anshu Blaggana, et al. [3]. They revealed that only 40% subjects brushed twice daily. About 17% reported use of dental floss and 20% used either mouthwash or tongue cleaner as adjuncts. A total of 58% had knowledge that infrequent brushing led to dental caries, staining of teeth, dental plaque and bleeding from gums. Most of them knew sweets (92.7%) and soft drinks (67.8%) affected dental health. Only 12.9% visited dentist regularly after every 6-12 months.

G Manjunath, et al. found overall oral health knowledge attitude and behavior is poor among school teachers [8].

J M A Farsi, et al. conducted the similar study on Saudi school students in Jeddah city and found that knowledge, attitude, and behavior concerning periodontal health among young Saudi school students living in Jeddah city are in need of improvement [9].

Better oral hygiene knowledge and practices were found in students who visited dentists regularly which might be due to individual level oral health education and motivation received by them. Thus, key to an informed and motivated public lies in the hands of the profession, as well as the authorities. Our study is limited in the fact that the generalizations from this study may not be applicable to other areas as Kulgamis unique in its social and demographic factors. Further, there is a need for follow-up to find if the survey itself had any influence on the attitude or knowledge of participants. Health promotion, with its core ideas of equity and equality, empowerment and advocacy, provides a novel though a complex approaches to improve not only general health but oral health also. It shifts the responsibility for health from the formal health care system to individuals, communities and decision- makers at all levels of society. Dental health education should be incorporated into the existing school curriculum. The program for dental health education and various didactic activities should be structured in such a manner as to gain the student's interest and obtain a high priority of social acceptance. The objective should be to maintain that level of acceptance throughout the student's lifetime. The education programs should thus be motivating, vibrant, and closely matched to the learning aptitude established by the child at each educational level. Community group effort can also reinforce interventions to endorse improved oral health. Efforts should be synchronized between school personnel, dental health care professionals, as well as parents to make certain long-term remuneration. In future more surveys on larger scale like that on state level or national surveys should be carried out and the data obtained be used to formulate better dental health programs for our country.

Conclusion

This survey furnishes the background data to get insight into the status of awareness of secondary level school students regarding oral health. The clinical implication of this survey was to emphasize on the need for the oral health education of the school children aiming at improving oral health knowledge and continuous implementation of school oral health promotion programs. As, school age is the right time when the behavior can still be molded, secondary level students would be the appropriate target group to receive the first organized intervention leading towards correct knowledge along with a positive attitude which is essential to bring about a change in their oral health behavior.

References

1. Harender Singh, Sanjeeb Chaudhary, Abhishek Gupta, Anusha Bhatta. Oral Health Knowledge, Attitude, and Practices among School Teachers in Chitwan District, Nepal. International Journal of Dentistry, 2021; Vol. 2021, Article ID 9961308, 7 pages, 2021.
2. Peres MA, Macpherson LMD, Weyant RJ, Daly B, Venturelli R, Mathur MR, Listl S, Celeste RK, Guarnizo-Herreño CC, Kearns C, Benzian H, Allison P, Watt RG. Oral diseases: a global public health challenge. Lancet, 2019 Jul 20; 394(10194): 249-260.
3. Blaggana A, Grover V, Anjali, Kapoor A, Blaggana V, Tanwar R, Kaur H, Haneet RK. Oral Health Knowledge, Attitudes and Practice Behaviour among Secondary School Children in Chandigarh. J ClinDiagn Res., 2016 Oct; 10(10): ZC01-ZC06.
4. Sharda JA, Shetty S, Ramesh N, Sharda J, Bhat N, Asawa K. Oral Health Awareness and Attitude among 12-13-year-old school children in Udaipur, India. International Journal of Dental Clinics, 2011; 3(4): 16–19.
5. Fotedar S, Fotedar V, Bhardwaj V, Thakur AS, Vashisth S, Thakur P. Oral health knowledge and practices among primary healthcare workers in Shimla District, Himachal Pradesh, India. Indian J Dent Res., 2018; 29: 858-61.
6. Al-Omiri MK, Board J, Al-Wahadni AM, Saeed KN. Oral health attitudes, knowledge, and behaviour among school children in North Jordan. J Dent Educ., 2006; 70(2): 179–87.
7. Mathur A, Gupta T. Oral health attitude, knowledge, behaviour and consent towards dental treatment among school children. Journal of Orofacial Research, 2011; 1(1): 6–10.
8. G. Manjunath, N. Kumar. Oral health knowledge, attitude and practices among school teachers in kurnool-Andhra Pradesh. Journal of Oral Health and Community Dentistry, 2013; 7(1): 17–23.
9. Farsi JM, Farghaly MM, Farsi N. Oral health knowledge, attitude and behaviour among Saudi school students in Jeddah city. J Dent., 2004 Jan; 32(1): 47-53.