

Knowledge of Primary School Teachers Regarding Emergency Management of Dental Traumatic injury in children: A Survey in Vadodara City¹Dr. Priyanka M Patel, BDS, Daswani Dental College and Research Centre, Kota, Rajasthan²Dr. Apexa Tuvar, 3rd year Postgraduate Student, Department of Prosthodontics, Darshan Dental College, Udaipur, Rajasthan³Dr. Rutu Patel, Intern, Darshan Dental College and Hospital, Udaipur, Rajasthan⁴Dr. Nishtha Patel, Intern, Darshan Dental College and Hospital, Udaipur, Rajasthan**Corresponding Author:** Dr. Priyanka M Patel, BDS, Daswani Dental College and Research Centre, Kota, Rajasthan**How to citation this article:** Dr. Priyanka M Patel, Dr. Apexa Tuvar, Dr. Rutu Patel, Dr. Nishtha Patel, “Knowledge of Primary School Teachers Regarding Emergency Management of Dental Traumatic injury in children: A Survey in Vadodara City”, IJMACR- November – December - 2021, Vol – 4, Issue - 6, P. No. 154 – 158.**Copyright:** © 2021, Dr. Priyanka M Patel, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License 4.0. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.**Type of Publication:** Original Research Article**Conflicts of Interest:** Nil**Abstract****Aim:** The purpose of the study is to assess the knowledge of primary school teachers regarding to emergency management of traumatic dental injuries in Vadodara City.**Material and method:** A self-designed questionnaire was administered to 190 primary school teachers of Vadodara city.**Result and Conclusion:** A total of 190 teachers responded to the survey. The collected data were subjected to statistical analysis. This study reveals a lack of knowledge among primary school teachers regarding emergency management of dental injuries.**Keywords:** Traumatic dental injuries, School teachers, Management of traumatic injury**Introduction**Dental traumatic injuries are common in infancy, childhood, adolescence. It is, in infancy and childhood, particularly relevant in terms of public health burden, because of the economic cost and number of hours of the treatment and absence from the school, the long-term consequences of trauma can in the form of compromised oral health and especially the psychological impact when there is loss of front tooth.¹Traumatic dental injuries are highly prevalent from infancy to adolescence.² Epidemiological studies have revealed that children from 8–12 years often suffer from dental injuries.³ Dental trauma may vary from minor tooth fracture to extensive dentoalveolar damage involving supporting structures and tooth displacement or avulsion. Its treatment is complicated and can be quite expensive. In addition, follow-up visits may be

necessary for many years which adds to the total expenditure on the patients' side.^{4,5}

Emergency management of traumatic dental injuries is not only the responsibility of dentists alone but a great role can also be played by school teachers who are available at the site of the accident. So, School teachers are likely to be among the first to see a child immediately after an injury has occurred. Moreover, children spend about 40% of their awake time in school and are more engaged in sports or playing activities. Therefore the knowledge and attitude of school teachers regarding emergency management of dental trauma is critical to ensure good prognosis of the clinical treatment.^{6,7}

Hence the purpose of the present study is to assess the knowledge of school teachers with regard to emergency management of traumatic dental injuries in Vadodara City.

Material and methods

Sample and data collection: The present Cross-sectional observational survey was conducted among 190 primary school teachers in Vadodara, Gujrat. Teachers present on the day of data collection were included in the study. List of school teachers under Vadodara city was obtained from District education officer, served as a sampling frame.

Questionnaire: The questionnaire was composed of two sections. The first section included basic demographic information, participants gender, age, years of experience. The second part consisted of questions about whether the respondents had received formal first-aid training or acquired dental trauma information management of dental traumatic injuries.

Result

Results expressed as frequency distribution tables were analyzed using Statistical Packages for the Social Sciences (SPSS) version 16.0. Basic demographic distribution of the subjects is illustrated in **Table 1**. The overall mean age of the respondents was 34.03 ± 7.20 years. The majority (58.94%) of participants were male, more than half (66.31%) less than 5 years of work experience. Majority of the Participants (94.21%) did not receive Dental Trauma Management Training. **Table 2** summarizes the response towards knowledge questions. About 64.7% of school teachers had a positive response that it's the moral responsibility of school teachers to take care of the traumatic dental injuries that occur during the school hours. Regarding the importance of time for saving a tooth, 41.57% believed that time is not an important factor in saving a tooth whereas 58.42% positively agreed that if a tooth is lost in an injury requires prompt treatment to save the tooth. 46.84% teachers agreed that dental trauma management is an emergency situation. Only 27.89% people agreed that the teacher's intervention in school dental injuries plays an important role in saving a tooth. Only 39% of participants were aware about knocked out teeth whereas 61% participant had no idea about knocked out teeth. When question is asked about "Would you replant (put back) the tooth into the socket from which it avulsed 29% of teachers replied Yes and 71% replied No. When respect to the question "How would you transport it to the dentist" 34% of teachers replied tap water method of transport method whereas 33% of teachers had no idea about that. Approximately 51.57% had a negative attitude towards wearing a mouth guard in outdoor/contact sports.

	Attributes	n (%)
Age	20-30 years	85 (44.73)
	31-40 years	57 (30)
	41-50 years	34 (17.89)
	> 50 years	14 (7.36)
Gender	Male	112 (58.94)
	Female	78 (41.05)
Years of experience	< 5 years	126 (66.31)
	> 5 years	64 (33.68)
Dental Trauma Management Training	Received	11 (5.78)
	Not received	179 (94.21)

Question	Response	n (%)
It is moral responsibility of teachers to take care of the tooth injuries that happened in school hours.	Yes	123 (64.73)
	No	67 (35.26)
Time plays an important role for saving a tooth.	Yes	111 (58.42)
	No	79 (41.57)
Dental trauma management is an emergency situation.	Yes	89 (46.84)
	No	101 (53.16)
Teacher's intervention in school dental injuries plays an important role in saving a tooth.	Yes	53 (27.89)
	No	137 (72.10)
If the tooth is broken, is the broken part important according to you?	Yes	92 (48.42)
	No	98 (51.58)
Do you know, what is knocked-out tooth?	Yes	75 (39.48)
	No	115 (60.52)
Have you done first-aid training	Yes	15 (7.89)
	No	175 (92.10)
Would you replant (put back) the tooth into the socket from which it avulsed	Yes	55 (28.94)
	No	135 (71.05)
How would you transport it to the dentist	Tap water	65 (34.21)
	Saline	21 (11.05)

	Milk	16 (8.42)
	Tissue paper	23 (12.10)
	Plastic Bag	22 (11.57)
	Don't Know	33 (17.36)
Wearing a mouth guard should be made compulsory in all outdoor sports.	Yes	92 (48.42)
	No	98 (51.57)

Discussion

Trauma to the teeth is very common among school-going children and frequently at the age group of 7-11 in India.⁸ Prognosis of the traumatized teeth depends on the prompt treatment and it becomes a fundamental responsibility for the school teachers especially primary as they are present at the time of trauma.⁹ This study was conducted to assess the knowledge among the primary school teachers in Vadodara, Gujrat regarding traumatic injuries and its emergency management.

Teachers are likely to be in contact with the students soon after an episode of Traumatic dental injuries. It is their knowledge of emergency procedures that is crucial in ensuring a better prognosis of the clinical treatment.¹⁰ The effective initial management or emergency management reduces the risk and severity of the condition. An understanding of traumatic injuries will help the teachers to have a keener eye on injuries and fractures among school children. Result of our study in accordance to the study conducted by Hashim et al. (2012)¹¹ and Nirwan M et al. (2016)⁵. The present study, thus, revealed that optimum and essential knowledge about emergency management of dental trauma of primary teachers in Vadodara city is grossly insufficient.

Conclusion

The knowledge regarding dental trauma management was not sufficient among the primary school teachers. The large majority of school teachers did not receive any training related to dental trauma management.

This issue should be seriously addressed on a large scale. We suggest educational programs should be developed, for teachers to improve their knowledge so that proper dental first-aid procedures can be achieved.

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