



ORIGINAL RESEARCH PAPER

Dentistry

AWARENESS AND KNOWLEDGE OF AVULSION AMONG SCHOOL TEACHERS: A SURVEY STUDY OF NAVI MUMBAI REGION

KEY WORDS:
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ABSTRACT

Objective: Traumatic dental injuries are common in school going children, making it essential for school teachers and primary caregivers to be aware about the management of this emergency. The objective of this study was to evaluate the knowledge and awareness of school teachers on dental avulsion in Navi Mumbai region. **Methodology:** A questionnaire was formulated and validated by 10 experienced pediatric dentists. This validated questionnaire was circulated amongst the school teachers in Navi Mumbai region. Total of 137 completed questionnaires were received which were subjected to statistical analysis using SPSS software. **Result:** The survey suggested that even though school teachers were aware about avulsion, they lack knowledge regarding the management of such a dental emergency.

INTRODUCTION:

Traumatic Dental Injury (TDIs) are a very common type of dental injury in school going children amounting to about 5% of all injuries in this age group.[1] A traumatic dental injury can vary from being a simple chipping of the tooth to avulsion. Avulsion is the most common dental emergency encountered as the outcome depends majorly on the extraoral dry time. The prevalence of avulsion among all traumatic dental injuries is between 0.5–16.0% [2]

The prognosis of this traumatic injury is highly dependent on the emergency first aid provided immediately after the incident. Ideally, immediate reimplantation is the ideal method to conserve the immature permanent tooth and maintain its viability in the long run. Protective stabilisation using splints is also essential to maintain the tooth and promote healing. [3,4]

The availability of such a treatment may not be immediately possible. However, primary care givers and school teachers are often the first responders to such incidents, their knowledge and preparedness to manage dental trauma remain largely unexplored. Many studies have been done to assess the knowledge and awareness of parents and guardians. However no study has been done, to the best of our knowledge, to assess the awareness of school teaches in Navi Mumbai region.

As the data is not available, this current study aims to assess the awareness and knowledge regarding the management practices of school teachers in dealing with dental avulsion, with a focus on the differences in handling primary and permanent teeth.

Methodology:

A questionnaire regarding the knowledge and awareness of avulsion management amongst the school teachers was created and validated by 10 experienced pediatric dentists with more than 5 years of clinical experience. The inclusion criteria was those teachers in Navi Mumbai teaching children in the age group of 5 to 9 years.

A cross-sectional survey was conducted and was distributed among 135 school teachers of Navi Mumbai city belonging to government, semi and private schools. The objectives of the study were explained to all the school teachers who participated in the study and also informed consent was obtained from them. A questionnaire of 18 close questions

was circulated to the school teachers which consisted of both closed and open-ended questions, that were designed to gather data on awareness regarding traumatic dental injury especially avulsion, knowledge about identification of the primary and permanent tooth, first-aid provision for the incident as well as past experience regarding its management

The questionnaire was circulated online using a Google Forms link, and responses were collected over a period of four weeks. A total of 1000 responses were received however, as per the inclusion criteria, 264 were excluded as they were ncomplete. Finally, 736 responses were analyzed quantitatively and qualitatively to assess the knowledge and awareness regarding the management practices of avulsion by school teachers.

Results:

In the current survey, 65% teachers had between 5 and 10 years of experience in their profession, while 25% had over 10 years of experience.

On the basis of the responses received, 67% (507) of teachers are aware of dental injuries, of which 52% had never encountered Traumatic dental injuries. The school teachers reported that 49% of them came across dental injury during school hours at least once in a year. Of all the injuries encountered, avulsion was reported to be making up 23% of the incidences.

Of the 736 responses, 84% responded that they could easily identify the difference between an avulsed primary and permanent tooth. However only 427 of the teachers believed that the treatment plan differs for permanent and primary dentition, whereas 20% didn't agree with the difference in the treatment strategy.

The survey revealed that only 47% correctly identify avulsion as complete tooth removal whereas 20% believed it to be a soft tissue injury. Apart from this, only 27% believed that there could be a chance of an underlying fracture.

48% of the teachers were aware of the term reimplantation and its importance case of avulsion. However, they lacked practical knowledge and majority 315 recommended seeking professional help immediately as they were not aware of the emergency first aid regarding avulsion. They also recommended the involvement of parents instead of

intervening in the process.

243 of them recommended washing the tooth or storing it in dry atmosphere in a handkerchief. Most of them were unaware about the use of milk or Save-a-tooth as a storage media. 215 suggested the storage of the fallen tooth in water.

The results revealed that while most teachers were aware of dental avulsion, they lacked critical knowledge on its management, particularly the distinction between management of permanent and primary teeth. Most of the teachers didn't have the knowledge about avulsion which made it difficult for them to follow the management. The findings highlight the need for targeted educational interventions to enhance the ability of school teachers to effectively manage dental traumas and reduce long-term complications for children.

CONCLUSION

Avulsion of permanent teeth is one of the most serious dental injuries. Prompt and correct emergency management is essential for attaining the best outcome after this injury, and the prognosis is very much dependent on the actions taken at the place of accident and promptly following the avulsion.

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