

ORIGINAL ARTICLE

AWARENESS AND ATTITUDE OF PARENTS FOR SPORTS INJURIES FOR THE AGE GROUP OF 5-13 YEARS

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ABSTRACT:

Objectives: The objective was to enable the clinician to formulate a set of instructions which can be given to parents, so as to make them aware and increase their knowledge, which will help them to promptly and properly manage an emergency case of dental trauma. **Material and Method:** A total of 50 parents of children aged 5-13 years of age who came to the OPD of the institution to receive care were included in the study for survey over the time period of 4 months with the help of self administered questionnaire **Result:** The demographic characteristics of the participating parents; indicate that 45% of parents were from rural area and 42% of parents belonged to >30 years age group. Also, 42% of parents were educated below graduate level and 36.7% of parents had previous experience of trauma to self or others. **Conclusion:** lack of proper knowledge on emergency management of dental trauma among the participants of this survey, there was willingness among parents to gain knowledge regarding emergency management of dental trauma.

Key Words- Dental trauma, Knowledge, Emergency

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INTRODUCTION-

Epidemiological studies of dental trauma have shown that most dental accidents in children occur at home, followed by school.¹ Various studies conducted among different populations have reported prevalence rates for traumatic dental injuries to be between 4.9%-37%.²⁻⁷ One of the most serious traumatic dental injuries is avulsion, in which one or more teeth are completely knocked out of their alveolar sockets.² Avulsions constitute 0.5%-16% of all traumatic dental injuries to permanent anterior teeth^{3,4} and most often involves the maxillary central incisor⁵ Primary and permanent anterior teeth are not only important for aesthetics but also essential for phonetics, mastication, integrity of supporting tissues, psychological and mental wellbeing⁶. Avulsion injuries are three times more common in boys than girls because of their active participation in sports and games and occur most

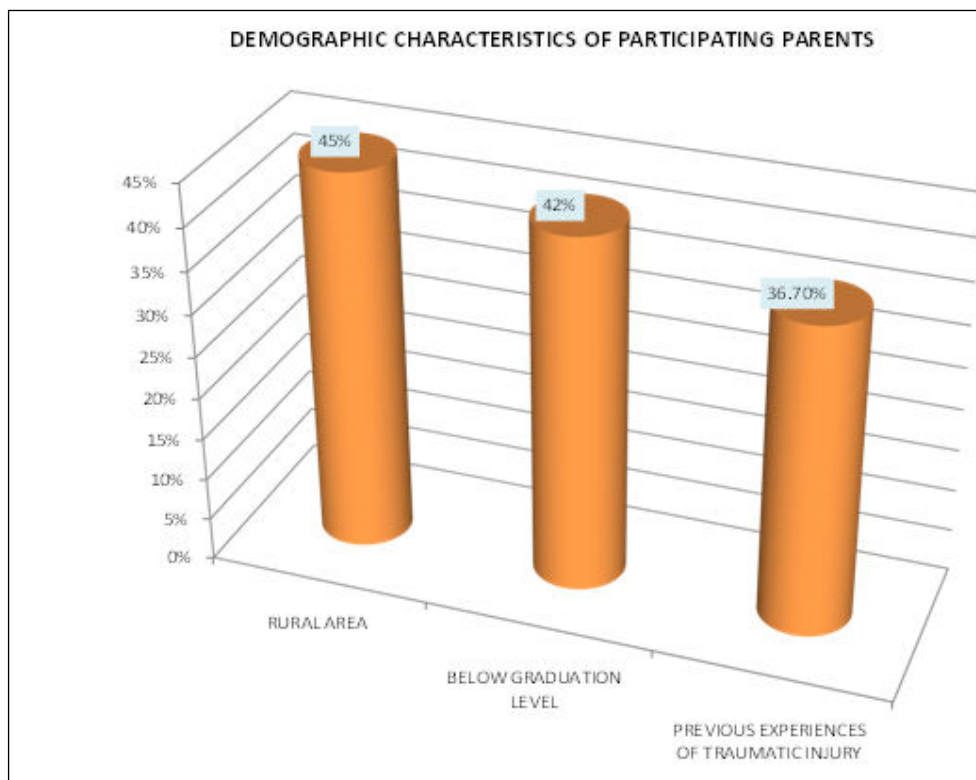
commonly at the age of 7-9 years when permanent incisors are erupting^{7,8}. Ideally, an avulsed tooth should be immediately replanted in its socket in order to avoid further damage to the periodontal membrane.⁹ The prognosis of a replanted tooth depends on the period of time elapsed between trauma and replantation, the type and condition of storage medium, the stage of root formation and the presence of contamination¹⁰. The aim of this study was to assess the knowledge and attitude of parents towards the emergency management of dental trauma. Before planning educational campaigns for parents, it is necessary to be aware of the knowledge level of parents. The objective was to enable the clinician to formulate a set of instructions which can be given to parents, so as to make them aware and increase their knowledge, which will help them to promptly and properly manage an emergency case of dental trauma.

MATERIAL AND METHODS

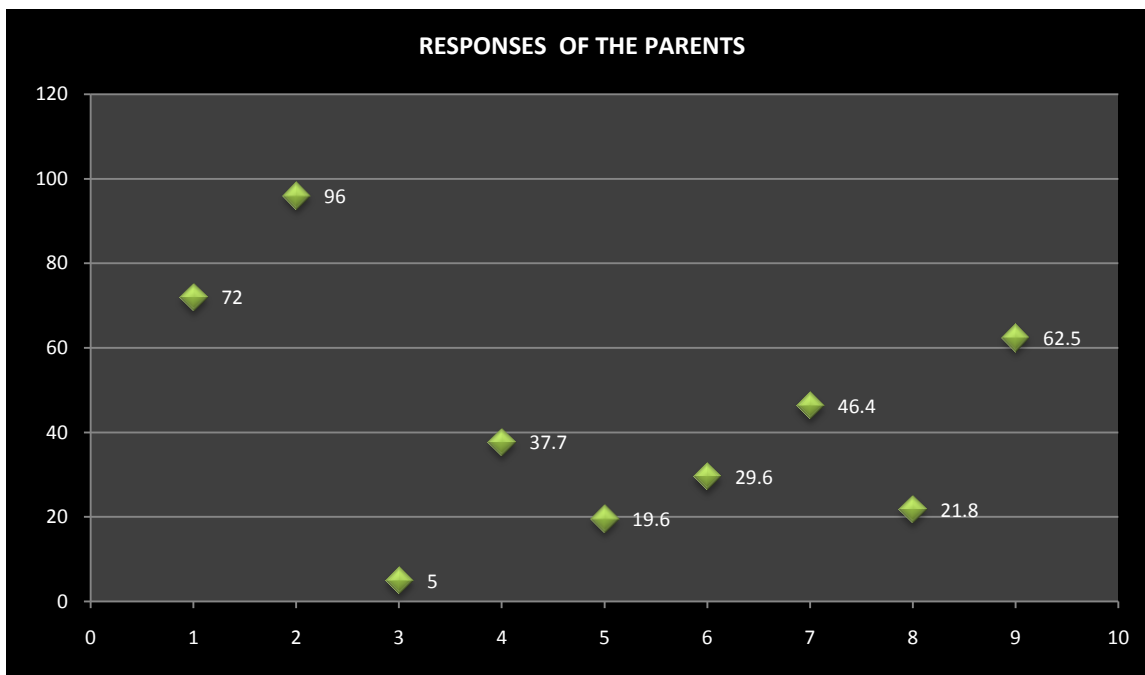
A total of 50 parents of children aged 5-13 years of age who came to the OPD of the institution to receive care were included in the study for survey over the time period of 4 months with the help of self administered questionnaire. Participation in the study was voluntary and completely confidential. The questions in questionnaire were based on the awareness among parents which was designed and modified from questionnaires used in earlier studies. It was prepared in English as well as in the regional language which was easy to understand and respond to the questions. Before onset of the survey, an ethical permission was taken from the ethical committee of the Institute. A brief explanation was given regarding the questionnaire before distributing the questionnaire to the parents. An investigator was appointed to clear the doubts of the subjects regarding the questionnaire. The questionnaire was divided into 2 parts, the first part of the questionnaire was based on the personal information like name, age, sex, education level, residing area and the second part of the questionnaire was based onto the questions related with attitude and the awareness about dental first aid among parents. Education level of the parents were divided as upto secondary education, upto graduation level and post graduation level. The data was analysed on basis of the response given in questionnaire and the results were calculated and expressed in the form of percentage and the statistical analysis was done using a Statistical software namely SPSS version 17.0.

RESULTS-

The demographic characteristics of the participating parents; indicate that 45% of parents were from rural area and 42% of parents belonged to >30 years age group. Also, 42% of parents were educated below graduate level and 36.7% of parents had previous experience of trauma to self or others. 72% of parents felt that it is important to have an educational program in management of dental trauma, 96% of parents would like to attend an educational program on management of dental trauma. 95% of parents were not satisfied with their knowledge on the management of dental trauma. 37.7% parents said that they have an previous experience of traumatic injury in their children. 70.3% of the participants were not able to recognize the damaged front tooth in 80.4% would not search for lost tooth. 46.4% would seek professional advice immediately and 25% would seek professional advice within 30 min, few hours and before next day. 37.5% would not go for a professional advice if the child does not have any pain. 62.7% would take the child to dental hospital after dental trauma and 37.2% would go to general hospital. 21.8% would replant the tooth in its socket and 68.2% would not replant the tooth. Milk was chosen as transport media by 8% of parents, 12% parents would use ice, 5% chose water, 40% parents would use paper tissue or handkerchief, 30% parents would take the tooth in plastic wrap and 5% parents would use antiseptic or alcohol as transport media.



Graph 1: Demographic Characteristics of participating parents



Graph 2: Questionnaire response

Table 1: Demographic Details of the Parents

SN	Demographic data	Percentage
Age	<30 years	42%
	>30 years	58%
Sex	Male	35%
	Female	65%
Education	Up to Secondary Education	42%
	Graduation	38%
	Post Graduation	20%%
Area	Rural	45%
	Urban	55%

Table 2: Questionnaire.

Question	Yes	No
1. What do you think is it important to conduct a program related with dental trauma education?	72%	28%
2. Would you like to attend that program?	96%	4%
3. Are you satisfied with your knowledge regarding dental trauma education?	5%	95
4. Have your child ever experienced the traumatic injury?	37.7%	62.3%
5. After the control of bleeding will you search for the lost tooth/teeth ? Knowledge about type of tooth.	19.6	80.4%
6. If yes was that tooth/teeth permanent or primary	29.6	70.3
7. Do you think that its important to seek professional help?	46.4	53.6%
8. Would you put back the tooth into the socket?	21.8	68.2%
9.if your child does not have pain still you would go for professional help	62.5	37.5%

Table 3: Attitude of Parents

SN	Action	No.
1. How urgent do you think that its important to seek professional help?	after few hr.	20%
	within 30 min	30%
	immediately	25%
	before the next day	25%
2. where will you take your child	Dental Hospital	62.7%
	General Hospital	37.3%
3. what media you would prefer to keep the tooth	Ice	12%
	Milk	8%
	Water	5%
	Plastic wrp	30%
	Paper	40%
	Other	5%

DISCUSSION

The study included 50 parents attending OPD of the institution who were surveyed with the help of a questionnaire for their knowledge and awareness regarding emergency management of dental trauma in a child. The age, gender, education level, residing area and previous experience of dental trauma were recorded in Part I of questionnaire. In Part II of questionnaire, was based on the knowledge and attitude of parents towards education of dental trauma management was assessed. Out of 50 parents, Extraoral time is paramount in determining the success of tooth replantation. A delay in providing emergency dental treatment may jeopardize the prognosis of an avulsed tooth¹¹. Approximately half of the parents recognized the urgency of seeking professional help as immediately for avulsion injury. However, some of them did not realise the importance of seeking immediate professional help and were concerned primarily with bleeding and pain control measures. Pain constitutes one of the major reasons for seeking professional help. Many parents did not feel the need to see a doctor if the child has no pain. This seems to be a common finding among Indian population. So parents should be asserted about significance of seeking professional advice after dental trauma irrespective of pain. Regarding the important question of replantation, 21.8% of the participants would have tried to put the tooth back in its socket; although rest of the parents were not confident about undertaking the tooth saving procedure or may not know how to do it. The reasons for reluctance to replant avulsed teeth could be related to lack of knowledge, hurting the child or to the felt urge to stop the bleeding, which is perceived by most people as life threatening. In cases with multi-injury trauma, the replantation of an avulsed tooth may require a low priority but in case of an isolated dental trauma, a simple procedure of replantation could make a huge difference not only in the prognosis of the tooth, but also influence the facial growth, function, esthetics and psychological impact on the patient.¹² Storing the avulsed tooth in a solution compatible with cell viability until

replantation is a critical procedure however dry storage selection was prevalent among parents. For transport of an avulsed tooth, paper tissue or handkerchief was the favoured medium for 55% of parents followed by plastic wrap by 60%% . In a study on school teachers by Chan *et al.*¹³ a large number of respondents chose ice or iced water as the preferred storage medium; this may be related to the popular use of ice for transportation of human organs and accidentally detached limbs often reported in the mass media. Although patient's mouth may function well as storage medium, only few of the subjects parents were aware of that. The concept of dry storage among parents indicated the lack of knowledge on how avulsed teeth should be handled after an accident. They were not aware that dry storage during transport could seriously prejudice the normal healing process and the prognosis is related to injury to periodontal membrane during the time the tooth is out of its socket.¹⁴ Dental trauma sequele like pulp necrosis and root resorption may present later sometimes and therefore successive visits are instrumental in timely detecting and treating such problems. The results of this study indicated low level of knowledge regarding tooth avulsion and replantation procedures to be followed in emergency. The findings are in accordance with other studies conducted on parents^{1,15,16} .The residing area and age of parent did not affect their knowledge and awareness. Moreover, well-educated parents also had very little or no information about dental trauma first-aid. The lack of significance in correct answers between those with and without such experience indicated that past experience did not seem to have increase the knowledge of the correct emergency procedures. This is because very little or no information about tooth avulsion and replantation had been given to most of them. Dental injury prevention and management should be recognized as a major public health issue and adequate resources to be allocated for research in this area along with the development of prevention programmes.

CONCLUSION-

Within the limitations of this study, it can be concluded that despite the lack of proper knowledge on emergency management of dental trauma among the participants of this survey, there was willingness among parents to gain knowledge regarding emergency management of dental trauma.

REFERENCES-

1. Abdellatif AM, Hegazy SA. Knowledge of emergency management of avulsed teeth among a sample of Egyptian parents. *J Adv Res.* 2011;2:157–62.
2. Andreasen JO, Andreasen FM. *Textbook and Color Atlas of Traumatic Injuries to the Teeth*, 4th ed. Oxford: Blackwell Publishing, 2007:444-480.
3. Lygidakis NA, Marinou D, Katsaris N. Analysis of dental emergencies presenting to a community paediatric dentistry centre. *Int J Paediatr Dent* 1998;8:181-190.
4. Saroglu I, Sonmez H. The prevalence of traumatic injuries treated in the pedodontic clinic of Ankara University, Turkey, during 18 months. *Dent Traumatol* 2002;18:299-303
5. Petrovic B, Marković D, Peric T, Blagojevic D. Factors related to treatment and outcomes of avulsed teeth. *Dent Traumatol* 2010;26:52-59
6. Pujita C, Nuvvula S, Shilpa G, Nirmala S, Yamini V. Informative promotional outcome on school teachers' knowledge about emergency management of dental trauma. *J Conserv Dent.* 2013;16:21
7. Andreasen JO. *Traumatic injuries of the teeth*. The CV Mosby Co: St. Louis; 1972.
8. Andreasen JO, Borum MK, Jacobsen HL, Andreasen FM. Replantation of 400 avulsed permanent incisors. 3. Factors related to root growth. *Endod Dent Traumatol.* 1995;11:69-75
9. Andreasen JO, Andreasen FM. *Textbook and Color Atlas of Traumatic Injuries to the Teeth*, 4th ed. Oxford: Blackwell Publishing, 2007:444-480.
10. Santos ME, Habecost AP, Gomes FV, Weber JB, de Oliveira MG. Parent and caretaker knowledge about avulsion of permanent teeth. *Dent Traumatol* 2009;25:203-208.
11. Andreasen JO, Borum MK, Jacobsen HL, Andreasen FM. Ninety five percent of participants were willing to attend an educational programme on dental trauma. *Endod Dent Traumatol.* 1995;11:76–89
12. O'Neil DW, Clark MV, Lowe JW, Harrington MS. Oral trauma in children: A hospital survey. *Oral Surg Oral Med Oral Pathol.* 1989;68:691–6
13. Chan AW, Wong TK, Cheung GS. Lay knowledge of physical education teachers about the emergency management of dental trauma in Hong Kong. *Dent Traumatol.* 2001;17:77–85
14. Sae-Lim V, Lim LP. Dental trauma management awareness of Singapore pre-school teachers. *Dent Traumatol.* 2001;17:71–6
15. Al-Jundi SH. Knowledge of Jordanian mothers with regards to emergency management of dental trauma. *Dent Traumatol.* 2006;22:291-2
16. Oliveira TM, Sakai VT, Moretti AB, Silva TC, Santos CF, Machado MA. Knowledge and attitude of mothers with regards to emergency management of dental avulsion. *J Dent Child (Chic)* 2007;74:200–2

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