Reasons for emergency dental visit – A retrospective study

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Article History:
Received on: 05 Sep 2020
Revised on: 05 Oct 2020
Accepted on: 08 Oct 2020

Keywords:
Emergency, Dental Visit, Extraction, Abscess Drainage, Pain Management, Trauma

ABSTRACT

The irregular dental care can result in acute clinical problems that may lead to various emergency visits. Emergency dental visits are the care of patients who present oral problems. The aim of the study was to identify the reason for patients seeking treatment for dental emergencies among the Chennai population. The Participants were randomly selected for the study, inclusion criteria for the participants were the patients who reported between June 2019 to March 2020 to a private Dental College, and Hospital Chennai, the purpose of the visit was observed from the patient information given during the time of visit. Results showed that the reason for emergency dental visit patients was for abscess drainage in males is 13.33% and females are 8.89% for emergency extraction in males is 28.89% and females are 44.44% for emergency pain management is 2.22% female patient only for emergency trauma management is 2.22% male patient only. From the present study, we can conclude that the common reason for emergency dental visit among Chennai population was for extraction and abscess drainage.

INTRODUCTION

Emergency dental visits are the care of patients who present oral problems. The reasons for the visit are dental and orofacial pain. The treatment objective is to remove pain and uncomfortable stimulus. (Cunha et al., 2001) The recommendation that a child’s first dental visit should occur during the child’s first year of life has had a significant effect on dental disease prevention, with long-term benefits for the child. (Fleming et al., 1991)

Similar studies by (Lygidakis et al., 1998) have shown that toothache due to dental caries was the most frequent complication and main source of patient complaints. A significant number of emergency visits were due to caries in primary posterior teeth. (Andreasen, 1981) A large number of children were brought to the dentist with complaints that had started long before and had used over-the-counter medication. (Majewski et al., 1988) Ayah Qassem Shqair et al. stated that toothache due to dental caries was the most frequent complication and main source of patient complaint. (Shqair et al., 2012)

Despite the decline in dental caries prevalence and the efforts to improve the quality of oral health, most of the population, mainly those who do not have...
guaranteed dental assistance, seek dental treatment for the relief of pain and discomfort. (Somasundaram et al., 2015) Various studies agree that the disease still accounts for the majority of dental emergencies in child patients. (Sakai et al., 2005) The fact that patients often look for urgent dental appointments instead of regularly-scheduled dental care indicates that the dental practitioner needs to develop a screening method to determine true dental emergencies. (O’Neil et al., 1989)

Similar studies stated that People who live in rural areas were disadvantaged in relation to accessing the emergency oral care from oral care facilities compared to those who live in urban areas. (Jeevanandan and Govindaraju, 2018; Nair et al., 2018; Panchal et al., 2019) Respondents from rural areas were more likely than respondents from urban areas to give reasons such as distance from their home, lack of money for transportation to dental clinics; being treated by traditional healers and using medicines at home for not seeking emergency oral care from oral care facilities. (Kikwilu et al., 2008) A significant number of patients who come to the emergency clinic are children. (Meadow et al., 1984). Previously our team had conducted numerous studies which include in vitro studies (Packiri, 2017), survey (Gurunathan and Shangugaveel, 2016; Ravikumar et al., 2017; Govindaraju et al., 2017a), clinical trials (Christabel, 2015; Govindaraju et al., 2017b) and case reports (Jeevanandan and G, 2017). Now we are focussing on the retrospective study. Hence the present aim of the study is to identify the reason for children seeking treatment for a dental emergency at Saveetha Dental College and Hospital, Chennai. (Govindaraju et al., 2017c; Govindaraju, 2017)

MATERIALS AND METHODS

The study setting was university setting, the pros were data retrieval, and ethnicity and the cons were that the study is regional and was not done under different geographic location, the approval of the study was by the institutional ethical board of Saveetha Dental College and Hospital and the study was reviewed by two examiners.

The sampling for the study was done from the time period of June 2019 to March 2020 and all cases reported in the time period were recorded and the purpose of the visit was observed from the patient information given during the time of visit. The data was cross-verified for errors measure taken to minimise sampling bias was by simple random technique followed the internal validity of the study was a random selection of patients who visited for an emergency dental visit, and the external validity was defining the eligibility criteria of the sample age group.

The data was collected by evaluating the case sheets of the patients who visited the private dental hospital data and was reviewed by one reviewer the data was entered in Microsoft ms excel sheet and the data was transferred to IBM spss version 20.0 and the variables were defined the independent variables were demographics such as age and dependent variables was reason for emergency dental visit incomplete data was managed by patient recall or by telephonic communication the data analysis was done by descriptive statistics (percentage, mean and standard deviation) & inferential test (chi square test)

RESULTS AND DISCUSSION

The irregular dental care is associated with acute clinical problems that may lead to various emergency visits. (Blinkhorn et al., 1991) There are many recent studies regarding emergency room visits by patients for dental causes. Visits to the emergency dental visit reflect both a lack of access to regular primary dental care and the underlying extent of both dental infection and trauma. (Harrington et al., 1988) Similar Despite differences in the overall health care system, the present study was to determine the time trends, demographics, and conditions of emergency dental visits and the various reasons for emergency dental visits by patients to Saveetha Dental College, Chennai was analysed in the present study.

Graph 1: Shows association between age and reason for an emergency dental visit.

From Graph 1 we can infer that among patients visiting for an emergency dental visit, the common reason was for extraction among all the age groups, maximum seen in the 21 to 30 years age group.
Table 1: Shows association between gender distribution and reason for Emergency Dental Visit. Chi square test p value 0.338 (> 0.05) showed not a statistically significant association

| Reason for Emergency Dental Visit | Total | P Value |
|-----------------------------------|-------|---------|
| Abscess                           | 10    |         |
| Extraction                        | 33    |         |
| Pain management                   | 1     |         |
| Trauma                            | 25    | 0.338   |

(28.89%), p value 0.022 (< 0.05), there is a statistically significant association between the reason for emergency dental visit and age. From Table 1 and Graph 2 we can infer that patients visiting for emergency abscess drainage in males is 13.33% and females are 8.89% for emergency extraction in males is 28.89% and females are 44.44% for emergency pain management is 2.22% female patient only for emergency trauma management is 2.22% male patient only. P-value 0.338 (> 0.05), there is no statistically significant association between the reason for emergency dental visit and gender. Among the total patients visited for an emergency dental visit, 44.44% were males, and 55.56% were females.

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that this rise in emergency dental visits seems most pronounced among adults between the ages of 18 and 44 years

Graph 1, X-axis shows reasons for an emergency dental visit, the Y-axis shows number of patients, the blue color represents incision and drainage, green color represents extraction, brown color represents pain management and violet color represents trauma. Chi square test, p value 0.022 (< 0.05), there is a statistically significant association between reason for emergency dental visit and age, the common reason for the emergency dental visit was for extraction particularly in the 21 to 30 years age group.

Graph 2, X-axis shows gender distribution and the Y-axis shows number of patients. Blue color represents incision and drainage, green color represents extraction, brown color represents pain management and violet color represents trauma. Chi square test, p value 0.338 (> 0.05), there is no statistically significant association between reason for emergency dental visit and gender, the common reason for the emergency dental visit was for extraction among both males and females.

The findings from the present study add to the consequence with the previous studies. The limitations of the present study were that it was performed for the available smaller sample size in a single dental hospital which may not provide results of the entire population so further studies must be done in a larger population, It is recognized that children from low-income families tend to receive episodic or emergency dental care. At the same time, those from higher-income households will visit the dentist more regularly for preventive checkups. (Edelstein, 2002) However, one of the limitations of this study is that no information on socio-economic conditions was collected.

Further studies should assess the socio-economic profile of patients attending dental emergency services and differences in dental service use between social classes. Similar studies can be performed in future under a larger population to identify the num-
ber and reason for an emergency dental visit to provide better clinical treatment. (Subramanyam et al., 2018)

CONCLUSIONS

From the present study, we can conclude that the common reason for emergency dental visits among patients in the Chennai population was for extraction and abscess drainage, so the dental practitioners must be aware and be prompt enough in providing the emergency treatment.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

Funding Support

The authors declare that they have no funding support for this study.

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