Home remedies for patients suffering from dental pain during lockdown-A questionnaire survey

Pavithra A S¹, Anjali A K²

¹Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Science, Saveetha University, Chennai, Tamilnadu, India, 600077
²Department of Pathology, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Science, Saveetha University, Chennai, Tamilnadu, India, 600077

ABSTRACT

The lockdown prevailing due to the pandemic has led to complete inaccessibility of any dental clinics even at times of emergency. Hence, dental patients are now resorting to home remedies to relieve their toothache. The main aim of this study is to know home remedies for patients suffering from mild dental pain during this lockdown condition and to spread possible remedies they can do at home itself rather than moving out of the house. A total of about 50 people were taken in this study where the questionnaires were spread among dentists, Ayurveda health care professionals, pharmaceutical workers, medical doctors, and practicing students. The questionnaires were framed and distributed through Google forms. The results were collected and then analysed through SPSS software. Descriptive statistical analysis was carried out and chi square test was used and p value was calculated. From the survey, it is seen that salt water is mostly suggested by health care professionals for dental pain as home remedies. Henceforth it can be advised to be taken by the patients suffering from mild dental pain in this lockdown.

INTRODUCTION

Dental pain is more common in populations who are at higher risk of dental caries (Brundha et al., 2019). Dental pain may occur at any age, in any gender, and any geographic region (MP and Nallaswamy, 2019). The diagnosis and relief are considered as one of the main responsibilities of dentists (Prashaanthi and Brundha, 2018). However, because of the pandemic spread of COVID-19 have made people be under lockdown situations (Ayo-Yusuf and Naidoo, 2016; Kumarswamy, 2016) in many parts of cities and rural areas the public gathering is prohibited to control the virus spread. In this situation, even dental clinics are closed (Dhavale et al., 2019). For mild tooth pain the people visiting the doctor can minimize the spread of infection. So in this situation, home remedy plays a key role in minimizing dental pain and spread of infection (Cohen, 2009). Self-care is one of how people without access to professional care can actively engage in managing their oral health problem (Kumar and Brundha, 2016). Studies showed that individuals aged 18-34 reported a much higher experience of toothache; they prefer home remedies as the first choice (Shabir, 2019). 70% of people take home remedies given by parents and grandparents as children are usually in an anxious situation (Timothy et al., 2019). In another study it is noted that many Sudanese use some traditional methods,
including self-care remedies to relieve dental pain especially in the outskirts and rural areas to minimize pain (Ferdioz and Brundha, 2016; Shreya and Brundha, 2017). There is no evidence that during lockdown people are more prone to tooth pain and they take the home remedy as the traditional method to minimize the conventional technique is better than home remedy or not (Gilbert, 2000; Jesylne et al., 2016).

The main aim of this study was to know and identify the traditional home remedy that can be given to patients suffering from mild dental pain. To minimize visits to dental clinics for mild dental pain and reduce the chance of spread of infection.

Figure 1: Age distribution

Figure 2: Gender distribution

MATERIALS AND METHODS

Research approach and design:

A cross-sectional questionnaire survey was conducted using an electronic distribution like Google Forms. There were about 15 questions in each questionnaire. The questions include demographic details of the participants and knowledge on home remedies. The questionnaires were typed in google forms and shared using WhatsApp to the specific community including dentist, medical doctor, ayurveda health care professionals, pharmaceutical workers. The study was conducted in the period of April to May 2020 in Coimbatore district. As the electronic approach is the best way to approach a large number of community peoples for data collection as well as suitable in present conditions where people have to avoid gathering, close contact, etc. for prevention of COVID-19. A simple random sampling method is used.

Figure 3: Occupation of participants

Figure 4: Awareness about lockdown situation

Population, sample, and sampling:

A total of about 100 participants were selected for the survey. The study population was chosen from following groups such as group1-dentist, group2-dental and medical students, group 3 Ayurveda health care professionals and group 4- pharmacists. The participants were asked to fill the Google forms. The questions were simple and understandable, multiple-choice questions.

Data analyses:
The results were collected and then analysed through SPSS software. Descriptive statistical analysis was carried out and chi square test was used and p value was calculated.

Figure 5: Awareness about home remedy

Figure 6: X-axis represents the group and Y-axis represents the number of participants.

RESULTS AND DISCUSSION

Natural products have been used since ages as an antidote for multitudinous diseases. There had been an abrupt decrease in the curve of usage of these traditional remedies in day to day life due to increasing age in the pharmacological products. However, Due to the current pandemic situation, the limitation to step out of the house to even visit a dental professional, have brought back the uses of home remedies to cure tooth ache.

Figure 1 shows that 29% of participants were between 23-25 years old, 47.3% of participants were 26-28 years old, 3.6% of participants were 29-30 years old, 3.6% of participants were 30-35 years old, 16.4% of participants were more than years old.

Figure 2 shows that 76.4% of participants were female while 23.6% of participants were male. Figure 3 shows that 49.1% of participants were group 1, 16.4% of participants were group 2, 7.3% of participants were group 3, 16.4% of participants were group 4, 10.9% of participants were group 5.

Figure 4 shows that 98.2% of participants were aware of the present lockdown situation while 1.8% of people were not aware of the lockdown situation.

Figure 5 shows that 69.1% of participants were aware of the home remedy for dental pain. 27.3% were not aware of home remedy for dental pain. 3.6% participants say they might know.

Figure 6 shows that there is no significant difference between the group and home remedy for dental pain (p-value = 0.1).

Figure 7 shows association between the groups and awareness about home remedy for dental pain. This bar graph represents the association between the groups and awareness about home remedy where blue color denotes yes, green color denotes no and brown color denotes maybe. Pearson’s chi-
square test is used, p-value = 0.1, (p>0.05). Hence, no significant association.

Figure 9: Response on suggestions for home remedy

Figure 7 shows that 63.6% of participants say that home remedy causes relief for dental pain. 9.1% of participants say that home remedy does not provide relief for dental pain. 27.3% of participants say that home remedy may provide relief for dental pain.

Figure 10: X-axis represents the group and Y-axis represents the number of participants.

Figure 8 shows that the bar graph Association between the groups and home remedies relieves dental pain, where blue denotes yes, green denotes no and brown color denotes may be. There is a significant difference between the groups and home remedies in relief dental pain (p-value=0.02). Pearson chi-square test was used, p-value=0.02 (p<0.05), hence it is significant.

Figure 9 shows that 62.97% participants suggest salt water as home remedy for dental pain, 16.67% participants suggest clove as home remedy for dental pain, 18.52% participants suggest ice pack as home remedy for dental pain. 1.85% participants suggest both as home remedy for dental pain. Figure 10 shows that there is no significant difference between the groups and suggestions for home remedy of dental pain (p-value=0.14).

Figure 10 shows the bar graph represents the association between the groups of participants and suggestions for home remedy for dental pain where blue color denotes salt water, green color denotes clove, brown color denotes ice pack and purple color represents both. Pearson chi-square was used, p-value=0.14(p>0.05). Hence it is not significant.

Figure 11 shows that 41.8% of participants agree that home remedy is better than the conventional method. 25.5% participants did not agree that the home remedy is better than the conventional method.

Figure 11: Responses on home remedy better than the conventional method

Figure 12 shows that there is no significance between the group and conventional method better than home remedy, where (p value=0.06). The bar graph represents the association between the groups and conventional method better than home remedy, where blue color denotes yes, green color denotes No, brown color denotes may be and purple color denotes

In previous studies, it has been seen that home remedy was mostly used by patients who have low socioeconomic status and who are under poverty (Hannah, 2019). Individuals with toothache pain do not always seek relief by visiting a dentist (Kalaiselvi and Brundha, 2016). Those with low incomes who do not seek treatment (Ravichandran and Brundha, 2016). Self-care plays a prominent part with a dentist (Balaji et al., 2016) and a lot of people. In the end, those who seek relief from a dentist may also use self-care as an adjunct therapy. Our respondents showed a high incidence of toothache,
Figure 12: X-axis represents the group and Y-axis represents the number of response of the participants. Pearson chi-square test was used, p value-0.06, (p>0.05), Hence there is no significant association as expected in a low-income minority population. Non-prescription medicines/home remedies were our population’s first pain management technique, and are consistent with a previous study. (Shenoy and Brundha, 2016) Nevertheless, these remedies were found associated with adverse effects and complications of the tooth such as pain, discoloration, irritation, bad smell. Clove oil substitute might irritate gums (Brundha, 2015). Self-care without permission from health care professionals should be avoided medication can be taken with the advice of the dentist. (John and MP, 2016)

As clove is most recommended for dental pain it can be used as a measure to control the progression of dental infection. (Harsha and Brundha, 2017) Clove oil has a sedative effect it numbs the pain and provides relief for a short time. (Preethikaa and Brundha, 2018)

The limitation of this survey includes less sample size, the survey was not done in a population with higher authorities. As the survey was conducted in a short time different opinions were not collected from the vast population.

CONCLUSIONS

Within the limitations of the study, the health care professionals prefer salt water gargling. When the general public has no other choice of visiting dental clinics, they can follow traditional methods to relieve the pain temporarily. In case of severe pain and swelling due to tooth decay or any other dental trauma, they should meet the dentist and undergo treatment to prevent further complications.

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.

REFERENCES

Ayo-Yusuf, I. J., Naidoo, S. 2016. Social gradient in the cost of oral pain and related dental service utilisation among South African adults. BMC Oral Health, 16(1).

Balaji, S., Brundha, M. P., Path, D. N. B. 2016. Awareness of About Breast Cancer among Dental Surgeons. Journal of Pharmaceutical Sciences and Research, 8(8):797–797.

Brundha, M. P. 2015. A Comparative Study-The Role of Skin and Nerve Biopsy in Hansen’s Disease’, Research journal of pharmaceutical, biological and chemical sciences. Journal of Pharmaceutical Sciences and Research, 7(10):837–837.

Brundha, M. P., Pathmashri, V. P., Sundari, S. 2019. Quantitative Changes of Red Blood cells in Cancer Patients under Palliative Radiotherapy-A Retrospective Study. Research Journal of Pharmacy and Technology, 12(2):687–687.

Cohen, L. A. 2009. Toothache pain: behavioral impact and self-care strategies’, Special care in dentistry: official publication of the American Association of Hospital Dentists, the Academy of Dentistry for the Handicapped, and the American Society for Geriatric Dentistry, 29:85–95.

Dhavale, S., Singh, S., Parasher, R. K. 2019. Factors Associated with Fear of Falls in Indian Elderly: A Systematic Review. Indian Journal of Public Health Research & Development, 10(10):345–345.

Ferdioz, J., Brundha, M.P.2016. Awareness of stye. International Journal of Pharmaceutical Sciences Review and Research. unknown, 40(1):30–32.

Gilbert, G. H. 2000. Dental self-care among dentate adults: contrasting problem-oriented dental attenders and regular dental attenders. dentistry: official publication of the American Association of Hospital Dentists, the Academy of Dentistry for the Handicapped, and the American Society for Geriatric Dentistry, 20:155–163.

Hannah, R. 2019. Liquid Paraffin as a Rehydrant for Air Dried Buccal Smear. Research Journal of Pharmacy and Technology, pages 1197–1197.

Harsha, L., Brundha, M. P. 2017. Prevalence of dental developmental anomalies among men and women and its psychological effect in a given population. Journal of pharmaceutical sciences. search.proquest.com. Available.
Jesylne, P., Soundarajan, S., Murthykumar, K., Meenakshi, M. 2016. The Role of Cardamom Oil in Oral Health: A Short Review. *Research Journal of Pharmacy and Technology, 9*(3):272–272.

John, D. A., MP, B. 2016. Awareness of Vitamin A Deficiency among Middle Aged Men-Research. *Vitamins & Minerals, 05*(03).

Kalaiselvi, R., Brundha, M. P. 2016. Prevalence of hysterectomy in South Indian population. *Research Journal of Pharmacy and Technology, 9*(11):1941–1941.

Kumar, M. D. A., Brundha, M. P. 2016. Awareness about nocturia-A questionnaire survey. *Research Journal of Pharmacy and Technology, 9*(10):1707–1707.

Kumarswamy, A. 2016. Multimodal management of dental pain with focus on alternative medicine: A novel herbal dental gel. *Contemporary Clinical Dentistry, 7*(2):131–131.

MP, B., Nallaswamy, D. 2019. Hide and seek in pathology- A research on game-based histopathology learning. *International Journal of Research in Pharmaceutical Sciences, 10*(2):1410–1414.

Prashaanthi, N., Brundha, M. P. 2018. A Comparative Study between Popplet Notes and Conventional Notes for Learning Pathology. *Research Journal of Pharmacy and Technology, 11*(1):175–175.

Preethikaa, S., Brundha, M. P. 2018. Awareness of diabetes mellitus among general population. *Research Journal of Pharmacy and Technology, 11*(5):1825–1825.

Ravichandran, H., Brundha, M. P. 2016. Awareness about personal protective equipments in hospital workers (sweepers and cleaners). *International Journal of Pharmaceutical Sciences Review and Research, 40*(1):28–29.

Shabir, S. 2019. Interim home care for dental pain during COVID-19 pandemic-a mini review. *Journal of Indian Dental Association.*

Shenoy, P. B., Brundha, M. P. 2016. Awareness of polycystic ovarian disease among females of age group 18-30 years. *Journal of pharmaceutical sciences. search.proquest.com. Available.*

Shreya, S., Brundha, M. P. 2017. Alteration of Haemoglobin Value in Relation to Age, Sex and Dental Diseases-A Retrospective Correlation Study. *Research Journal of Pharmacy and Technology, 10*(5):1363–1363.

Timothy, C. N., Samyuktha, P. S., Brundha, M. P. 2019. Dental pulp Stem Cells in Regenerative Medicine – A Literature Review. *Research Journal of Pharmacy and Technology, 12*(8):4052–4052.