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KNOWLEDGE AND AWARENESS ABOUT HERBAL MEDICINES FOR TREATMENT OF PERIODONTAL DISEASES

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Abstract

Objective: As periodontal diseases affect the tooth and its supporting structures, it is very essential to assess the levels of knowledge and awareness among the undergraduates. With mechanical therapy being used, an alternative with the use of herbal medicines is essential for the treatment.

Materials and Methods: A cross sectional descriptive study, using convenience sampling method was conducted among the students of Saveetha Dental College and it included a self administered questionnaire.

Results: The data showed satisfactory levels of knowledge about the use of herbal medicines for the treatment of periodontal diseases. The awareness of the herbal medicines, the alternatives and the source of information about herbal medicines was analyzed and it was inferred that more awareness needs to be created.

Conclusion: Undergraduate trainees assume an imperative role in any health care system, since they are the future health care professionals of any society and so it provides a need to educate and motivate them on the use of herbal medicines.

Keywords: herbal drugs, periodontal diseases, therapeutics

Introduction

Periodontal disease is a chronic inflammatory disease that affects the supporting structures of the teeth and may lead to bleeding gums, mobility, and leads to tooth loss ^[1]. This mainly occurs when bacteria in dental plaque infect the gums and the supporting tissues. If left unchecked, can lead to major health problems. Gingivitis and periodontitis being the most common problems to occur ^[2]. With mechanical therapy being used for its management, it becomes essential to use alternative therapy for its treatment. Several studies now focus on herbal extracts as a source for treatment of periodontal

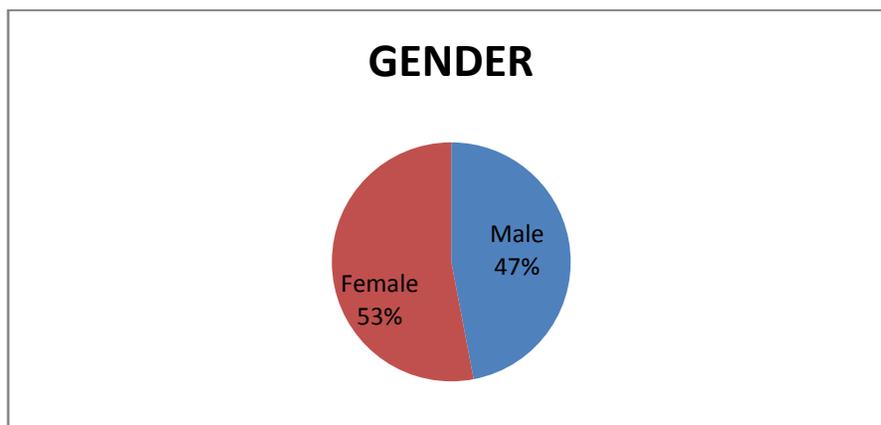
diseases ^[3]. The use of plant products to treat and improve dental health exists long since. Since herbal excipients are non-toxic, compatible and economically available they have paved the way for newer treatments ^[4-5]. Traditional Chinese Medicine (TCM) is a treasure-house which has shown miraculous clinical effects ^[6]. There are a number of traditional herbal remedies for the treatment and management of diseases related to teeth, gum and oral hygiene. Use of clove oil is an age old remedy still practiced for periodontal problems ^[7]. Complementary and alternative medicine (CAM) represent a group of diverse medical and health care systems, practices, and products that are not considered to be part of conventional medicine and herbal medicines fall under this caterogy ^[8]. The aim of this study is to assess the level of knowledge and awareness about the use of herbal medicines for the treatment of periodontal diseases among the dental undergraduates.

Materials and Method

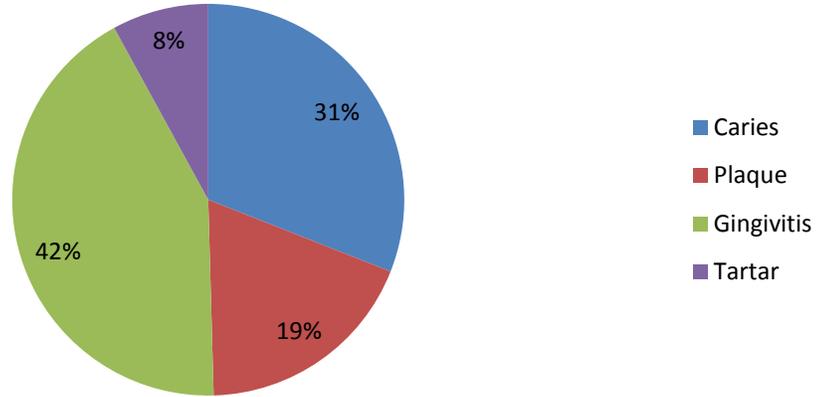
A cross sectional descriptive study, using convenience sampling method was conducted among the students of Saveetha Dental College to assess their level of knowledge and awareness on herbal medicines for treatment of periodontal diseases. The study instrument was a structured, self administrable questionnaire consisting of fifteen multiple choice questions (MCQs), encompassing major aspects of herbal medicines such as the definition, diagnostic modalities, treatment to rule out the underlining end organ damage and risk factors for the development of periodontal diseases.

An online survey was conducted and they were asked to fill the questionnaire for which ample time was provided. The survey was then collected and analyzed. Incompletely filled questionnaires were eliminated. The statistical analysis on the gathered data was carried out and the data was expressed as means or percentage of participants correctly responding to each question.

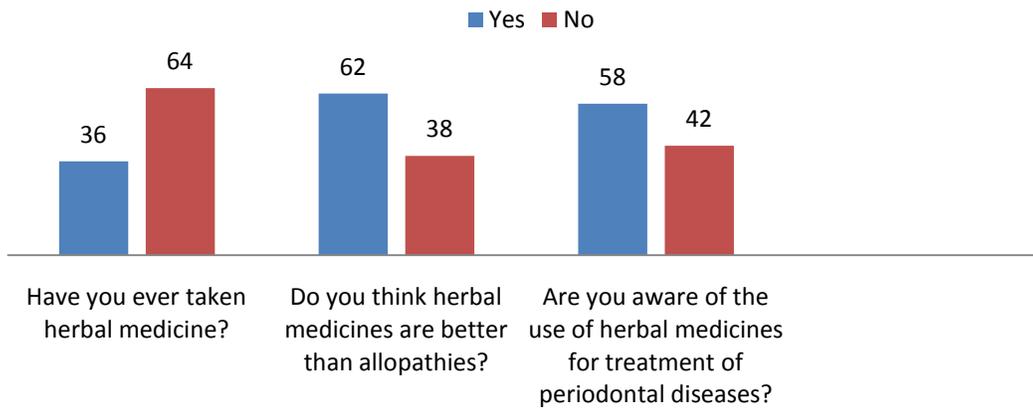
Results



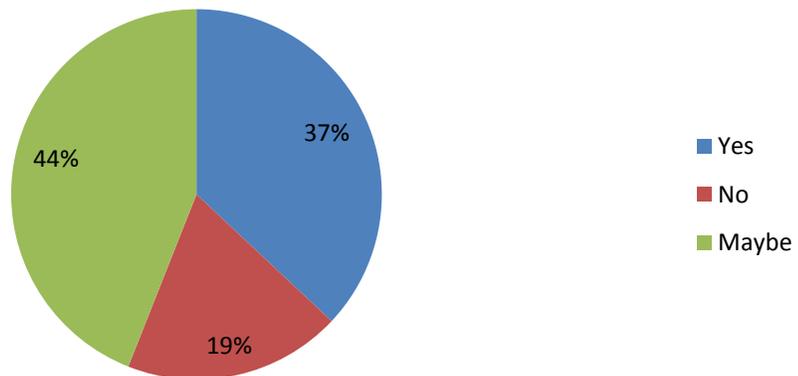
MOST PREVALENT PERIODONTAL DISEASE



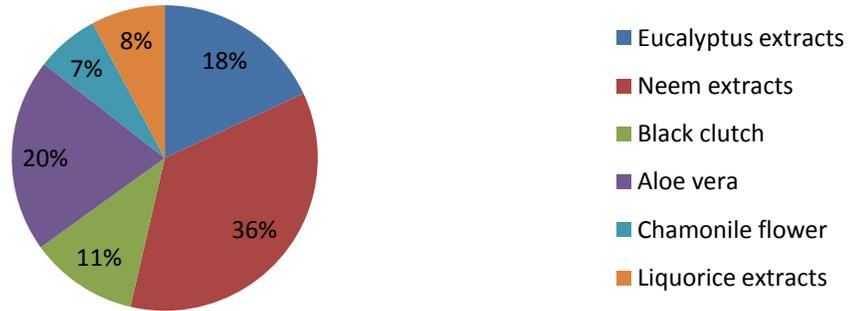
KNOWLEDGE ON HERBAL MEDICINES



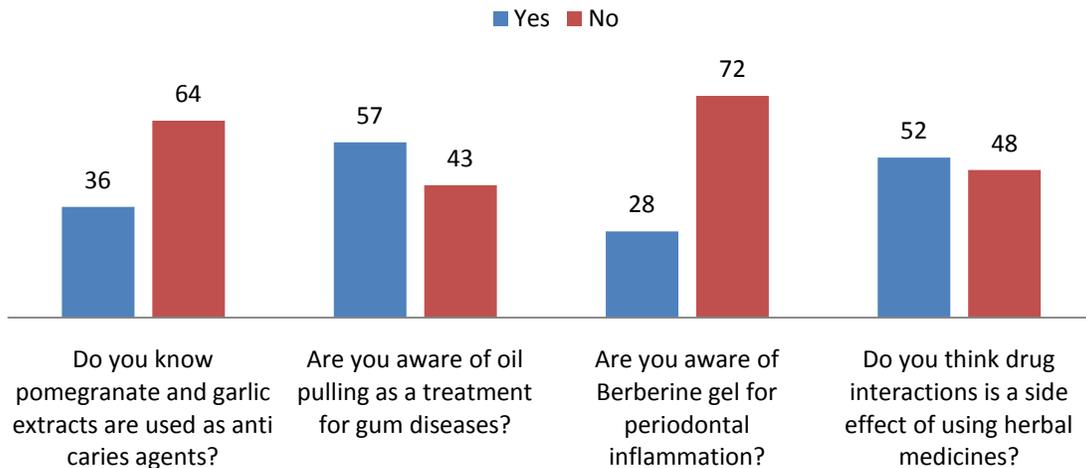
DO YOU THINK HERBAL MEDICINES ARE SAFE?



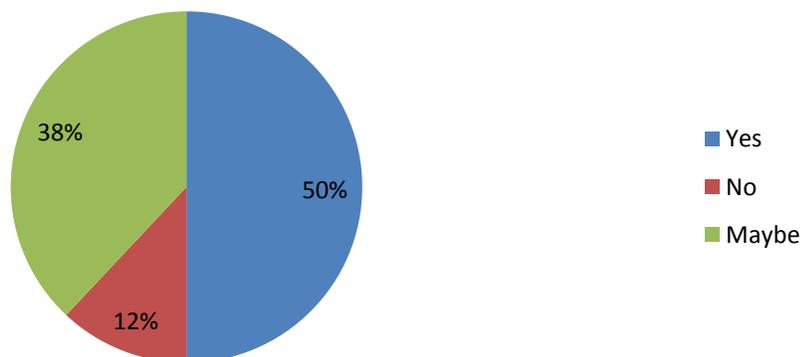
IDENTIFY THE HERB SOURCES YOU ARE AWARE OF FOR THE TREATMENT OF PERIODONTAL DISEASES



KNOWLWDGE ON HERBAL TREATMENTS



CAN TULSI EXTRACTS BE USED AS A HERBAL MOUTH RINSE?



HOW DID YOU OBTAIN INFORMATION ABOUT HERBAL MEDICINE?



THE MOST COMMON SIDE EFFECT OF HERBAL MEDICINE CAN BE



Discussion

The present cross-sectional descriptive study was done with the aim to assess the levels of knowledge and awareness among the undergraduates. The study assessed the knowledge and awareness about the etiology and risk factors of herbal medicines for treatment of periodontal diseases and its association with 100 entry level students in one dental college. In this study female response was 53% and male response 47%. Gingivitis was chosen by 48% of the population as the most prevalent periodontal disease.

64% of the population has not used herbal medicines for any treatments. Due to the lack of enough awareness, 62% of the people chose allopathies over herbal medicines. The safety of herbal medicines was uncertain by 44%. Neem extracts was most common herb, known by 59% of the population, followed by aloe vera extracts at 34% then eucalyptus extracts at 30%, and black clutch, liquorice and chamomile flower extracts. The use of pomegranate and garlic extracts as an anti caries agent was unaware by 65% of the population. 50% of the population suggested the use of tulsi extracts as a herbal mouth rinse. Friends/ relatives accounted for 44% of the means of awareness about herbal medicines, followed by social

media, internet and doctors. Sore throat was treated by herbal remedies by 32% of the people. 57% of the population is aware of oil pulling method as a treatment for gum diseases. The use of berberine gel for periodontal inflammation is not in awareness among the people. 53% of the population thinks that drug interaction is a side effect of using herbal medicines. Skin irritation is believed to be the most common side effect of herbal medicines accounting to 60% followed by photosensitivity and sleepiness.

Conclusion

Undergraduate trainees assume an imperative role in any health care system, since they are the future health care professionals of any society. Therefore this research study evaluated the knowledge about herbal medicines among dental students and interns, and has showed that there is good knowledge prevailing among them.

Although the awareness among the dental students is satisfactory , the knowledge, attitude and awareness on the risk factors, medications and practices provides a need to educate and motivate them on the use of herbal medicines on a regular basis in the curriculum.

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