Abstract

Objective: Oral health is a fundamental element of the general health; nevertheless, it has been disregarded than any other health problems especially among the underprivileged refugee population. This study was taken up to assess the knowledge, attitude, practice of oral health through a questionnaire survey and to probe into their status of caries and periodontal health among the refugees from Sri Lanka now living in the Tamil Nadu, India and to advocate improved oral health care delivery to them.

Materials and Methods: Sri Lankan Refugees above the age of 15 years were included in this cross-sectional study. The sample included 100 adults of the Moongiloorani refugee camp. American Dental Association (ADA) Type-3 examination was conducted. Data regarding demography and oral health practices was recorded on a structured format. For recording periodontal status CPITN index and for caries and treatment needs, DMFT index was used.

Results: A total of 100 subjects were examined. The prevalence of dental caries among 15-35 years, 36-55 years and above 55 years was 55.8%, 81.57% and 63.15% respectively. The prevalence of dental caries among male and female was 75% and 64% respectively. The prevalence of periodontal diseases among 15-35 years, 36-55 years and above 55 years was 65.11 %, 89.47% and 100% respectively. The prevalence of periodontal diseases among male and female was 85.7% and 79.16% respectively.

Conclusion: The study reveals that oral health status is poor and awareness less in the population studied. Thus, oral health should be given priority among the refugee population. Therefore, there is a requirement to develop preventive and promotional oral health strategies like periodical dental camps for this special population.

Introduction

General well-being is essential constituent of human life. Of it the oral health plays a pivotal role. There is currently a desperate need to improve oral health in India, especially among the underprivileged population. Refugees are people who have been forced to leave their homes or their country, either because of prosecution, war or violence. India has been home to refugees for centuries and has, from time to time continued to receive a large number of refugees from different countries. Sri Lankan Tamil refugees cross the sea to enter the southern Indian State of Tamil Nadu. The Government of India followed, a specific refugee policy regarding Sri Lankan refugees. Most Sri Lankan Tamils refugees in India have been residing in camps in the State of Tamil Nadu for more than four decades and have been granted freedom of movement within the camp areas, enabling work facilites for them as casual labor. The increase in oral diseases has led to an increase in oral health needs. Consumption of tobacco & alcoholic beverages has become common social habits all over the world. Minimal information exists for the planning and provision of oral health services. So, a greater understanding of preventive oral health practices among the refugees is imperative in order to appropriately target prevention interventions that are to be developed. Studies to assess the caries and periodontal status are helpful and imperative in estimating the prevalence of a disease in the population and thus identifying high risk sub-population which in turn would facilitate in promotive, preventive and curative health services; Hence a study was conducted in Moongiloorani Sri Lankan Tamil refugees camp, Tamil Nadu, India.

Material and methods

After obtaining consent from the village head authorities the study was taken up on the Sri Lankan Tamil refugees, spread in the camp of Moongiloorani in Sivagangai district, Tamil Nadu. An official permission letter was obtained from the head of the Moongiloorani refugees camp to conduct the survey during the period of September 2015. The ethical issues of the study involved the assurance of individual’s confidentiality and autonomy for the participants. Participants were informed of the purpose and design of the study, and were assured that participation was voluntarily with their confidentiality respected. Out of the camp population of approximately 450, only 100 participated in the study and were willing for examination of their oral cavity. The left over from the study were only those people who have left the settlement for business purpose on the day of
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examination, people went to other parts of the state for employment and those who were not willing. The examination of the subjects as per guidelines of American Dental Association for Type III examination was carried out in the camp premises using disposable mouth mirror, dental explorer, and torch light with subjects seated comfortably on an ordinary chair with backrest and the examiner sitting in front of the subject. Clinical examination included assessment of dental caries using decayed, missing, and filled teeth (DMFT) index by Klein, Palmer, Knutson for permanent dentition recorded on a structured format. The tooth was considered carious (D component) if there was visible evidence of a cavity, including untreated dental caries. The missing (M component) included teeth with indications for extractions or teeth extracted due to caries. The filled (F component) included filled teeth. Clinical examination of the periodontium was carried out using CPITN probes (designed by WHO/IDF), with applying a gentle probing force (20 g or lower) according to WHO criteria. Six segments were assessed for each individual. Pocket depth were measured at six sites around each tooth (mesial, midline, and distal on both lingual/palatal surfaces). The index teeth were 16, 11, 26, and 36, 31, 46. If less than two functional teeth existed, the sextant would have been classified as edentulous. Each sextant, based on which tooth showed the worst situation, was given a grade and registered according to the highest recorded at the index teeth. Each sextant was designated as healthy, when no treatment is required (Code 0 = TN0), or X (missing). In case of bleeding without calculus, it was recommended to improve oral hygiene (Code 1 = TN1). If calculus but no periodontal pockets were detected, oral hygiene instructions were provided and professional cleaning was carried out, if indicated (Code 2 = TN2). Presence of 4-5 mm pockets (Code 3), and 6 mm or deeper (Code 4) may or may not need treatment by deep scaling. The data regarding demography and oral health practices were recorded on a structured format. They were also health educated, for those subjects who needed further management was referred to the government hospital for further treatment.

Results
Graph 1
In the present study out of total 100 study population, males represented 28% (n=28) and the females 72% (n=72). The study population was categorized based on age into three groups as group 1 which included 15-35 years, group II, 36-55 years and group III- above 55 years. Group I had 43 subjects (43%), group II had 38 (38%) and group III, 19 subjects (19%). The socioeconomic status of the study population comprised of 3% upper middle class (n=3), 4% lower middle class (n=4) and 93% lower class (n=93).

The systemic conditions elicited from the study population include diabetes mellitus 10% and hypertension 13%. The habit history of the study population includes smoking only 3%, alcohol only 3%, smoking and alcohol 6%, betel leaf, areca nut with tobacco 17%. A questionnaire consisting of a set of question regarding their oral health was given to the study population. Table 1 and graph 2 and 3 shows the responses to the questionnaire and the indices used in the study which include CPITN and DMFT.
The prevalence of dental caries among male and female was 75.4% and 85.8% respectively. Table 2 also shows the prevalence of periodontitis among 15-35 years, 36-55 years and above 55 years was 55.8%, 81.57% and 63.15% respectively. The prevalence of periodontitis among male and female was 85.7% and 79.16% respectively.

**References**
1. https://www.unrefugees.org/refugee-facts/what-is-a-refugee/