

ABSTRACT

Introduction: Oral health behaviour, knowledge on oral health and utilization of available oral health care services are major determining factors of oral health in a community. Oral health behaviours have a bearing on the status of oral health and sound knowledge, positive attitudes, and better awareness on oral health leads to healthy behaviours related to oral health. Proper utilization of available oral health services is a key factor that leads to sound oral health in a community. Identification of defects in utilization of available facilities is needed to eliminate the barriers for utilization of oral health care services.

Objective: To assess the factors related to oral health behaviours, awareness on oral health, and utilization of oral health care services by army soldiers serving in hard-line areas in Jaffna peninsula.

Methods: A descriptive cross sectional study was conducted on a sample of 640 army soldiers who were deployed in Jaffna peninsula using multistage cluster sampling method combined with Probability Proportional to Size (PPS) technique. A judgmentally validated self-administered questionnaire was used which contained an array of questions on oral health behaviours, knowledge and attitudes, service utilization and barriers for utilization. Ethical clearance was obtained. Data was analyzed using SPSS version 21.0 and associations were explored using Chi-square test. The level of significance was 5%.

Results: Entire sample studied brushed teeth daily while 89.3% reported twice daily brushing, 97.5% brushed before breakfast and 52.2% brushed after dinner. Tooth brush was the mode of brushing for 99.8%. Toothpaste was the material used by 98.9%. Fluoridated toothpaste use was seen among 71.7% of the sample. Use of other cleaning methods was reported by 29.2% and of them, 61.5% used salt water. Refined food consumption at least once a day was seen among 66.3% and 24.6% consumed confectionary, 18.7% consumed fizzy drinks and 27.1% consumed fresh fruits once a day or more. Nearly half of the sample were ever betel chewers, 67.6% were ever alcohol users and 55.0% were ever smokers. Proportions having satisfactory oral health knowledge, attitudes, and awareness levels were 55.1%, 54.8% and 56.2% respectively. Of 70.2% reported to army dental centres and 70.6% visited them for PULHEEMS examinations. Of the sample, 93.3% were aware of the availability of army dental clinics within Jaffna peninsula and 45.3% perceived that the army dental clinic was within 1-5km from the camp site. Majority (81.0%) were of the opinion that their nature of work has not affected attending the army dental clinic. Statistically significant associations were observed between sociodemographic / occupational factors and oral health behaviours, attitudes and awareness, utilization and barriers for utilization.

Conclusions & recommendations: The favourable oral health behaviours reported in this study were, daily tooth brushing, brushing frequency, method, material used for tooth brushing, and relatively less frequency of consumption of confectionary and fizzy drinks by soldiers. Incorrect selection of bristle type, lack of understanding of bristle type, considerable proportion using non fluoridated toothpaste, not using other cleaning aids, high frequency of consumption of refined foods, low frequency of consumption of fresh fruits, high frequency of betel chewing, alcohol consumption and smoking could be considered as the findings which need attention from public health point of view. In generally a good level of oral health knowledge, positive attitudes, and good awareness was observed. Utilization of dental services was high and most were related to PULHEEMS. No prominent barriers were identified with regard to utilization of army dental services located in Jaffna peninsula. Systematic oral health education and promotion aiming improvement of oral health care utilization by army personnel and evidence based reorientation of existing army dental services to cater the changing circumstances was recommended.

Key words: oral health behaviours, oral health knowledge, awareness and attitudes, utilization, barriers, army soldiers