

Assessment of periodontal status of rural Nepalese population using the community periodontal index

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Abstract

Background: Periodontal diseases are the most common and widespread chronic dental diseases worldwide. It is mandatory to know the disease status and treatment needs of the target population, in order to establish preventive community programmes and to treat periodontitis. Update information about the periodontal health status of adults in Nepal is limited.

Aims and Objectives: To assess periodontal status of rural Nepalese population aged 35-44 years using Community Periodontal Index (CPI) and to analyze oral hygiene status of the population according to methods used for maintaining oral hygiene.

Materials and methods: In 1998, 300 residents of appropriate age were examined to assess their periodontal status with Community Periodontal Index (CPI) and Loss of Attachment (LOA). Basic demographic information was also collected according to WHO (World Health Organization) proforma.

Results: Among 300 subjects of 35-44 years of age, 156 (52%) were males and 144 (48%) were females. None had healthy periodontium, only 0.3% had bleeding on probing (Code 1). Shallow pockets (Code 3) were most prevalent at 41.67%, followed by calculus (Code 2) 37.33% and deep pockets in 20.33% of the surveyed population. 36% had no loss of attachment (Code I), 29.67% had 4-5 mm attachment loss, 19.67% had 6-8 mm attachment loss, 11.33% had 9-11mm attachment loss and 3.33% had >12 mm loss of attachment.

Conclusion: The prevalence of periodontal disease in 35 – 44 year olds was high in this epidemiological study for periodontal disease with CPI and LOA. Poorer periodontal health was observed in males, smokers with some chewing habits and with poor plaque score.

Key words: CPI, Periodontal status, Smoking, Oral hygiene

Introduction

Periodontal diseases are the most common and widespread chronic dental diseases worldwide. In developing countries, with acute shortages of trained dental manpower, high levels of unmet dental needs, and a scarcity of economic resources about 75 to 80 percent of the population live in rural areas¹. In order to establish community programmes to prevent and treat periodontitis, it is mandatory to know the disease status and treatment needs of the target population. The community Periodontal Index of Treatment Needs (CPITN) was developed for this purpose by the Oral Health Unit of the World Health Organization in collaboration with the Federation Dentaire Internationale.

It is a simple, time-saving method of assessing the treatment needs of a specified population group, and has stood the test in a number of major epidemiological studies on the prevalence of marginal periodontal disease^{2,3,4}. Simplifications to this index system have, however, entailed increasing criticism and a demand for more precise recording of periodontal parameters^{5,6}. Use of the CPITN for epidemiological purposes that is to obtain estimates of the prevalence and severity of destructive periodontal disease in a population⁷ must necessarily be based on the assumption that loss of periodontal support is accompanied by the formation of deepened periodontal pockets. However, the presence

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