



PERIODONTAL STATUS OF PEOPLE OF SOLUKHUMBU, NEPAL.

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ABSTRACT

Periodontal disease is a major public health problem in the world. Its prevalence is varied according to different variable. Severe periodontal (gum) disease, which may result in tooth loss, is found in 5-20% of middle-aged adults, and the rate varies across geographical regions. Community Periodontal Index of Treatment Needs (CPITN) was developed in the late 1970s. The CPITN was endorsed by the WHO for population-based surveys in the early 1980s (Ainamo et al. 1982) but was later renamed by WHO as the Community Periodontal Index (CPI)(WHO 1997) to foster its use as an index to measure periodontal status in populations. Cross sectional study was conducted in remote area of Nepal, i.e. solukhumbu. The result shows only 20 % of population was affected by periodontal disease i.e. score 3 and 4. The result should be verified by other similar study since the sample population is small and measurement tool has its inherent drawback.

KEYWORDS : periodontal disease, community periodontal index of treatment needs, community periodontal index, bleeding gum.

Introduction

Periodontal disease is a chronic inflammatory disease resulting in destruction of tissues and structure surrounding the teeth. Periodontitis affect all component of periodontium i.e.gingiva, alveolar bone, periodontal ligament and cementum. Its prevalence of periodontal disease dates back to early human civilization and recently the global epidemiological data suggests periodontal disease to be one of a major burden on oral diseases.(1-5)

Data on Prevalence of periodontitis in the U.S. population shows that 47.2% of adults aged 30 years and older have some form of periodontal disease. It also shows that periodontal Disease increases with age, 70.1% of adults 65 years and older have periodontal disease. This is more common in men than women (56.4% vs 38.4%), those living below the federal poverty level (65.4%), those with less than a high school education (66.9%), and current smokers (64.2%)(6).

India, second most populous country in the world contribute around 17.5% of the total world population affecting from periodontal disease.(7)

Different studies shows the variation in prevalence of periodontal disease in different part of the world. There are many methodological way of estimating periodontal disease. The main objective of this study is to obtain the prevalence of the disease in a respective area i.e. solukhumbu region of Nepal.

Materials and method:

examine and conduct survey in the region for 5 days. I recorded community periodontal index the oral hygiene awareness according to questionnaire. The data were entered and analysed by SPSS software version 20.

Result:

Among 143 participant, only 115 were taken into consideration.

		Frequency	Valid Percent
Valid	0	10	8.7
	1	37	32.2
	2	48	41.7
	3	17	14.8
	4	3	2.6
	Total	115	100.0

Table 1. Frequency distribution for CPITN value

54.5% were male and 45.5% were female. Only 33.6% were literate. 72.7% of the participant used to use tooth brush whereas rest do not brush (table 6). 32.9% don't have habit of gargling after food intake, 11.9% used to gargle every day and rest gargle sometime (table 11).

97.9% do not use any interdental aids.

Significance between community periodontal index and other variable (sex, occupation, education, habit, use of tooth brush, gargle and interdental aids) was calculated. There was no significant difference between periodontal disease and other variable (Table 2).

	P value
Sex	0.691
Occupation	0.271
Education	0.562
Habit	0.059
Use of tooth brush	0.977
Gargle	0.724
Interdental aids	0.717

Table 2

Discussion:

Earlier in the late 1950s, first attempts to measure periodontal diseases at the population level were made, using Russell's Periodontal Index were made, an innovative recording system that scored the presence and severity of both gingival bleeding and pocket depth (8-11).

Ramford tooth were also used for assessing periodontal condition which shows bias due to partial examination of selected tooth only. Community periodontal index is another tool for measurement of periodontal condition. CPITN methodology have been used in a few studies of populations in Swaziland, Mozambique and Rhodesia (15-17).

In asia and oceania region, among 3 national surveys reported in English two used the Community Periodontal Index. These were national survey of oral health in China (13) and in Hong Kong in 2001.(12).

Albandar et al. assessed the prevalence of overt gingival inflammation in a large group of adolescents without periodontitis, who were a subgroup among a larger group examined in the national survey of the oral health of United States children, and found that 82.1% of the subjects had gingival bleeding.(14) But this study shows 37% of population having gingival bleeding.

This study shows majority of population with score 1 and 2. This variation may be due to geoethnic dissimilarity.

Prevalences of periodontal disease within the Asian continent are at a similar level, in the range of 15–20% (18-19).

If we consider, loss of attachment as a criteria for periodontal destruction, then score 3 and 4 cumulatively consist of 20% of total subject in this study. Considering other risk factor like oral hygiene practice, literacy, socioeconomic status and use of interdental aids, it suggest low prevalence of periodontal disease. If we consider score 1 and 2 as periodontal diseases, only 10% of participant are totally free of periodontal disease.

Conclusion: People of Taksindu, Nepal do not experience more periodontal disease than can be explained by oral hygiene and exposure to risk factors. It may be due to genetic factor and life style.

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