

Introduction:

## CIGARETTE SMOKING AND EDENTULISM- A STUDY IN A NEPALESE POPULATION

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- □ Nearly 73% of smokers are in developing countries. Globally 48% of men smoke however, for women it accounts 22% in developed countries and 9% in developing countries (Poudel, Gurung 2013).
- Smoking is estimated to cause lung cancer, chronic respiratory disease, cardiovascular disease and poor oral hygiene. Poor oral hygiene leads to periodontal problems, which result in loss of tooth leading to edentulism. Edentulism has a detrimental effect on oral and general health.
- A study done in different ecological regions of Nepal (Pandey, Pathak 2002) suggested that frequency of tobacco use in adults was 68.4% in rural Kathmandu, 37.0% in urban Kathmandu, 54.7% in Terai region and 77.7% in mountain region. The overall smoking prevalence in Nepal ranges from 25% to 73% in adult men and from 0.8% to 60% in adult women across the different regions in the country (Jha et al. 1999).
- The changing demographic pattern of smoking may contribute substantially to future burden of smoking related illnesses. Nepal is one of many low- and middle-income countries where attention and resources applied to oral health have lagged behind other domains of public health. To take effective action, it is essential to know the magnitude and patterns of problem. To date no research has been conducted in Kathmandu, the capital of Nepal regarding smoking, chewing tobacco and edentulism whereas, there are well-documented studies across Europe and United States (Jansson and Lavstedt 2002, Krall 2006, Dietrich et al. 2007, Mai et al. 2013, Dietrich et al. 2015, Similä and Virtanen 2015).
- This study aims to explore the prevalence of smoking among Nepalese population, their perceived oral health problems and to identify the association between smoking status and edentulism. This study hopes to aid data for oral health action and serves as the evidence for future tobacco control activities. Furthermore, it will help increase awareness of the effect of smoking on oral health.

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| 1. Poudel, Gurung<br>(2013)  | Prevalence of smoking and perceived health problems among male population of Dharan municipality |
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| 2. Pandey, Pathak<br>(2002)  | Challenges of tobacco use behavior in central development region of Nepal                        |
| 3. Jha et al. (1999)   | Smoking and smokers in Sunsari, Nepal  |
| 4. Jansson,<br>Lavstedt (2002)   | Influence of smoking on marginal bone loss and tooth loss: a prospective study over 20 years     |
| 5. Krall, Dietrich, Nunn,<br>Garcia (2006)   | Risk of tooth loss after cigarette smoking cessation   |
| 6. Mai et al (2013)  | Associations between smoking and tooth loss according to the reason for tooth loss               |
| 7. Dietrich, Walter,<br>Oluwagbemigun,<br>Bergmann, Pischon,<br>Pischon, Boeing (2015) | Smoking, Smoking Cessation, and Risk of Tooth<br>Loss  |
| 8. Similä and Virtanen<br>(2015)   | Association between smoking intensity and<br>duration and tooth loss among Finnish middle-       |

## Method:

- The study will be carried out in dental colleges and hospitals of Kathmandu, and other part of Nepal from February 2021 to February 2022
- Specialist board certified 30 Prosthodontists will use online questionnaires in their patients' to self asses tooth loss and smoking status
- Structured questionnaire will be completed to gather knowledge regarding socio-demographic variables, smoking history, type and amount of tobacco consumption, medical history, brushing habit, dental visits, duration of edentulism, reason for extraction of teeth, awareness regarding ill effects of smoking on general and oral health, awareness regarding relation of smoking and edentulism, awareness regarding deleterious effect of edentulism, whether they are wearing prosthesis or not (with reasons) and pattern of edentulism based on Kennedy's classification of partial edentulism
- Current, former and non-smokers will be defined using criteria from Health Survey for England.



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## **Conclusion:**

Data regarding the long-term effects of smoking, smoking cessation and environmental tobacco smoke on tooth loss are limited in Nepal. Poor accessibility, low quality, and human resources gaps are key challenges to improving oral and general health systems. The limited capacity and insufficient distribution of trained oral health providers lead to focus on pain management or emergency treatment responses, rather than prevention. This together with high smoking prevalence leads to negligence of oral health and edentulism.