

## **ORAL HEALTH AMONG A GROUP OF ELEPHANT KEEPERS IN SRI LANKA**

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Current captive elephant keepers in Sri Lanka frequently smoke, consume alcohol and chew betel. These habits are known risk factors for the development of oral pathological conditions. Objective of this study was to examine oral pathological conditions in mahouts and to correlate them with their habits and life style. During August 2010, captive elephant keepers were requested to participate in a mobile dental clinic during the annual procession in Kandy. Their dental medical and social histories including food and other habits were recorded. Intra oral examination was done by experienced dental surgeons and DMFT (Decayed-Missing-Filled-teeth) were also recorded.

Out of 64 participants (aged 15-68 years; average age 37.3 years), 43 (67%) were smokers and 57 (89%) chewed betel. Forty two (66%) of them consumed alcohol. Thirty eight (59%) of them both smoked and chewed betel. Of the keepers who smoked, 59% smoked 6-10 cigarettes daily while 18% smoked 11-15 and 13% smoked < 5 cigarettes daily and 9% smoked only occasionally. Among the betel chewers, 27 (47%) chewed more than 10 betel quids per day while 12 (21%) chewed 6-10 quids, 10 (17%) chewed less than 6 quids and 8 (15%) chewed occasionally. Among those who consumed alcoholic liquor, 31(73%) were daily consumers and the rest consumed alcohol only occasionally. Out of the 64 participants, 12 (19%) had never gone to a dentist. Only 11 of them had got their teeth filled while only 3 had undergone periodontal treatment previously. The average number of missing teeth due to caries and periodontal disease was 5.8. One of them was fully edentulous at the age of 52 years. Gross calculus was present in 33 (51%), whereas 16 (25%) had mobile teeth and 4 (6%) had visibly bleeding gums. Approximately, 80% of them had stained teeth due to betel chewing and/ or smoking. Among them, 5 (8%) were clinically diagnosed as having mucosal lesions. Two of them had oral sub mucous fibrosis, while another 3 had angular cheilitis, glossitis and oral squamous cell carcinoma (later confirmed by histopathology). Although 40 subjects (62.5%) had carious teeth, the average number of carious teeth per person was 1.2. This may be attributed to their low levels of sugar consumption observed in the social history. According to the findings, M (missing) teeth, was the highest and F (filled) was the lowest indices among the subjects. This fact reflects the neglect of oral hygiene and lack of motivation to seek treatment for decayed teeth. Although the mean DMF value of the sample (6.3) of elephant keepers examined was lower than the average DMFT of the 35-44 years age group in Sri Lanka, which is 8.4 and it could be attributed to the small sample size and to the relatively younger age of the majority of the subjects. It can be concluded that the lifestyle and habits of the elephant keepers have made them vulnerable to both oral and systemic diseases.