

THE PREVALENCE OF TOOTH-BUDS EXTRACTION IN CHILDREN AND MOTHER'S KNOWLEDGE ON TEETHING SYMPTOMS IN CHILDREN OF TANZANIA

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Abstract: a total of 900 mothers were interviewed with regard to practice of tooth-buds extraction in children and 900 children aged 0-5 years old were examined for missing primary teeth, scar or wounds on the gums due to tooth-buds extraction. The prevalence of tooth-buds extraction at Ilembula Lutheran Hospital was 0.7% and in all cases the extracted tooth-buds were lower jaw canines.

Keywords: tooth-bud, teething, knowledge.

The practice by traditional healers of surgically extracting tooth-buds as a prevention or cure for diarrhea, fever and vomiting in children in Tanzania and other parts of Africa have been existing for many years [1, 2, 3]. This procedure increases the risk for both medical and dental complications like bleeding, pain, reduced weight gain and infections for example an increased risk for being contaminated with HIV/AIDS [4]. The procedure may also lead to damage of tooth-buds in the permanent dentition. Moreover, the procedure increases the likelihood for developing malocclusions in both deciduous and permanent teeth [1, 4].

The aim of the study was to estimate the prevalence of tooth-buds extraction and assess knowledge, with respect to teething and tooth-buds extraction among mothers with children aged 0-5 years.

Materials and methods: the study was conducted at Ilembula Lutheran Hospital in Tanzania which is a faith based organization.

Semi-structured questionnaire was used to collect information from the mothers by interview. Their respective children were examined clinically for missing teeth to explore tooth-buds which might have been extracted. The interviews of 900 mothers were performed by a calibrated research assistant and the clinical part was performed by the researcher (LS) during May to August 2006.

Results: the prevalence of tooth-buds extraction in the area was found to be 0.7%. The proportion affected ranged from none among the under 12 months of age group to 1.86% in the 25-36 months of age group. In all cases the extracted tooth-buds were lower jaw canines. The mothers knowledge on causes and management of childhood symptoms increased significantly with the level of education ($p < 0.05$). Age of the mother, marital status, number of children and socioeconomic class were not significantly correlated to the mothers' knowledge on causes of childhood symptoms ($p > 0.05$). A total of 81.4% of 540 mothers reported that their children had various teething signs and symptoms during tooth eruption. No socio-demographic feature was found to be statistically significant with mother's experience on teething signs and symptoms. Multivariate analysis showed that mothers with poor knowledge on management of childhood symptoms were more likely to send their children for tooth-buds extraction on future than the mothers with good knowledge on childhood symptoms management.

Discussion: in this study the prevalence of tooth-buds extraction was found to be low compared to previous studies which were done in other areas in the country and East Africa at large [1-5]. The prevalence figure in this study may be an underestimation of the real situation because it is diluted by the great proportion of children (43.7%) being less than 12 months old. Children at this age were still mainly breastfeeding and spending much of their time with their mothers and thus being less at risk to conditions which predisposes them to infectious agents for diarrhea, fever and other illnesses [5]. Also canine tooth-buds are not yet well developed in these very young children and thus their prominence on the gums is less marked [5]. On the other hand, in the age group 13-36 months children practice a more independent role using most of their time playing on the ground and thus contaminate their hands with infectious agents and therefore more susceptible for diarrhea, fever and other illnesses.

The low prevalence found in this study shows that the practice of tooth-buds extractions varies within the country, Tanzania. This is supported by the findings in some of the previous studies in other regions of Tanzania which found the practice being prevalent ranging from 10% to 16.9%. These indicators may give an impression that tooth-buds extraction practice is associated with specific tribes or areas. However more research is needed to compare the practice between various areas and tribes.

Conclusion: Further education is needed in educating these mothers so as to diminish the teething belief and its associated practices.

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