



# *Extreme Cultural Practices: Canine Bud Removal and the Role of Dental Hygienist*

Olga Bondaresco

Gladys Valverde

Pakeeza Hussain

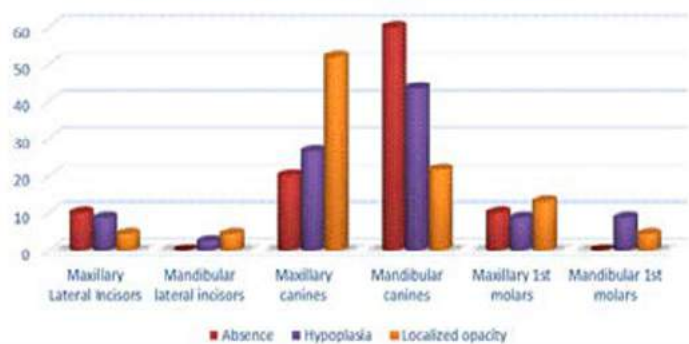


Canine Bud Removal (CBR), also commonly known as Infant Oral Mutilation (IOM), is the practice of removing infants' healthy canine tooth buds attached underneath the gum using traditional unsterilized tools.

This practice is most prevalent in different regions of East Africa. Sudan and Ethiopia record 70% prevalence, Tanzania 60.3%, Kenya 35%, and Uganda 16.1 % prevalence.



IOM-related dental anomalies per tooth



The practice of CBR is in dire need to be addressed in dentistry because the practice has been identified as a global health issue that has attracted calls to action aimed at pushing for its eradication in East Africa and other regions where it is practiced. CBR is a dangerous and destructive practice that requires attention and action.



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Data from different East African countries shows that the majority of the affected populations are influenced by cultural beliefs, perceptions that the practice is harmless, and existing knowledge that the practice treats diarrhea and other teeth-related symptoms.

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This practice of CBR is decreasing in infants due to the expansion of health care programs and parental awareness about the barbarity of the practice as well as its detrimental effects on their children.

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Various dental-related government bodies such as the American Academy of Pediatric Dentistry (AAPD) acknowledge that developing dentition and occlusion in infants is essential for the well-being of infants. The issue of CBR is essential for the knowledge of the general health of children going through the practice and, therefore, should be addressed with vigilance.





# “The dental complications of canine tooth bud removal in 2-12 years old children in Northwest Ethiopia”

Infant oral mutilation also known as canine tooth bud removal is the practice of removing infants canine teeth, most commonly without anesthesia and proper sanitary necessities. Typically the child is between 4-18 months old upon extraction. The common belief behind this, is that this preventative measure fights against common childhood ailments such as diarrhea and fever. This treatment tends to come with complications such as weakened tooth enamel or improper distribution of tooth enamel.

## **Purpose**

- The purpose of the study was to examine the “dental complications of canine tooth bud removal in 2-12 years old children in Northwest Ethiopia”.

## **Methods**

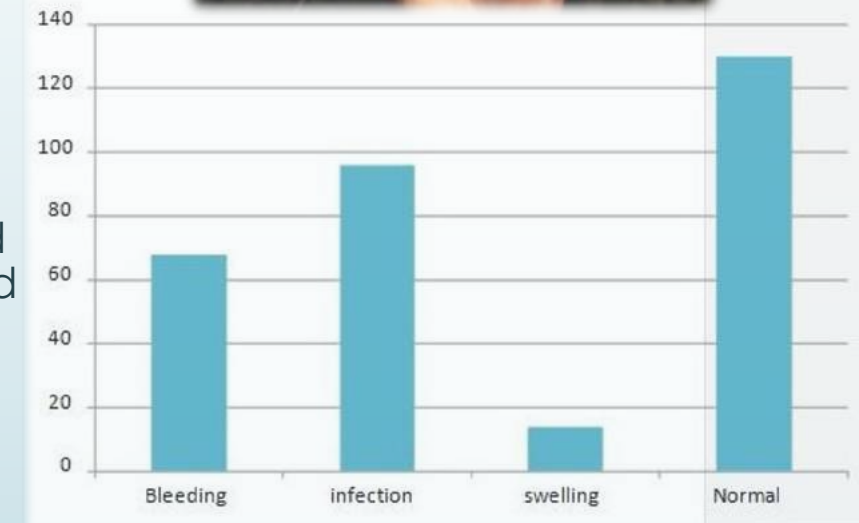
- The study took place at the University of Gondar hospital, using the sample population of children who came in. This insured proper randomization.
- Descriptive cross-sectional design was used for evaluation.
- The total sample population was 355 of children and this should be representative of the greater Ethiopian child population.
- Data was collected using both intra-oral examination and questionnaires.


## Study Results

- ▶ The questionnaire revealed that diarrhea (65.26%) and fever (15.26%) were common complications of teething that were attempted to nullify with the extraction of the canines.
- ▶ Missing and malformed canines were present in 87.1% of children who received infant oral mutilation.
- ▶ 57.8% of children who had their canines extracted suffered from bleeding or infections.
- ▶ Furthermore, 86.8% of children who came for this study experienced infantile oral mutilation, a significantly higher percentage than 70% national average in Ethiopia.

## Conclusion

- ▶ Infantile oral mutilation affects the development of the canines. Canines were malformed or were missing in the majority of cases. Infantile oral mutilation should be stopped from practice and needs to be targeted with a multifaceted solution to prevent this practice from continuing.





*“Agony resulting from cultural practices of canine bud extraction among children under five years in selected slums on Makindye: a cross section study”*



The research discusses the current practice of the myth false teeth, Canine bud extraction (CBE), as a remedy and the risk at which children are exposed during and after the procedure. CBE is a result of parents or guardian's assumption it would relieve children from fever, diarrhea, vomiting, cough and malaria. Often CBE is done by traditional healers who use unsterilized tools; thus children are exposed to blood-borne diseases like HIV/AIDs, septicemia, fever and death. The authors purpose is to understand the reasons of CBE, denounce the violation of children rights, and exhibit how common it is prevailed among these tribal groups.

**Methods:**

- Researchers designed a cross-sectional study.
- For this study 298 caregivers or parents of <5 years old children from five slums of Makindye were interviewed by a designed questioner.
- Traditional healers use bicycle spikes and nails as tools to remove the canine bud.
- Researchers measured sociodemographic parents' profiles, what determinates CBE, what common illness treated with (CBE) and also side effects of the CBE.



## Study results

- 56.7% of participants have 2 or more children <5 years old
- 90.3% participants practiced the CBE.
- 69.8% of procedures were done by traditional healers, 12.1% by health workers.
- 55.7% of participants knew the side effects of CBE, and 31% mention death as one of the effects.
- CBE is Commonly practiced to treat diarrhea 94.3% and fever 92.3%.
- 62.4% belief treats malaria
- Results are statistically significant.

## Conclusion

- CBE is a common practice in Makindye, Uganda.
- The “tradition” is carried out by immigrants thus is *not limited to one country*.
- Authors stated the urge of the dental and health education to parents.
- Also regulated the practices of the dentist in impoverished countries.



# *“Infant oral mutilation (IOM) related to traditional practices among inner city pre-school children in Sudan”*

## **Intro:**

IOM- Infant Oral Mutilation, enucleation of primary canine tooth germ to alleviate teething symptoms. Such as diarrhea, vomiting, teething pain, and fever. There have been many studies conducted in different parts of the globe to acquire data to accumulate the approximate prevalence of IOM. One of the studies have been conducted on eastern part of Africa in Khartoum, Sudan. A cross-sectional study, conducted by Alya Islam Elgamri, Azza Tagelsir Ahmed, Omer Elfatih Haj-Siddig et al. on inner-city pre-school children to collect a data on the prevalence of IOM. And the number of anomalies occurring due to this practice. The study also indicated the main cause behind this practice; which is diarrhea and low level of maternal education.

## **Methods:**

This study took place in Khartoum, Sudan on 12 government-based pre-schools with self-administered questionnaires and randomly selected 212 children to examine under the care of 3 examiners and 2 dentists.



### ► Results:

- Out of 227, 212 total participants, resulting in 93.8 %, when divided gender wise, 53.8% males and 48.2% females. Mean age of sample resulted in 4.7 years in total. P-value: <0.05 were considered statistically significant to determine the accuracy of data collection. 3.1% (seventy-nine teeth) showed dental anomalies associated with the practice of IOM. The most common anomaly was enamel hypoplasia with 58.23% of the affected teeth. Socio-demographics and teething-related risk factors of IOM were considered using P-value statistics regarding the contributing factors. Which led to the practice of IOM: geographic location, mother's education level, teething problems, diarrhea, and vomiting, which were the significant factors of IOM.

### ► Conclusion:

- This study helped determine the main cause behind the practice of IOM and where it is more prevailed. Which is among the inner-city children in Khartoum and its due to a cultural belief to elevate or relieve the symptoms of teething-related and due to low education level of parents, as they're not aware of the adverse effects of this practice, which can affect a child along their lives.
- The practice of IOM affects not only psychologically but also have short and long-term adverse effects on a person's health as it leads to failure of development of permanent dentition, enamel defects and adjacent primary and permanent dentitions, also, the development of peg-shaped permanent teeth.



## Infant Oral Mutilation and its adverse effects in the long run:

- ▶ IOM affects a person in many ways, not only with temporary symptoms and side effects but also throughout a person's whole life. Typically when a tooth germ from primary dentition is enucleated, it also effects the underlying permanent tooth germ, which gets damaged. As well along the adjacent tooth germs; especially, if the tooth germ is being burnt. Studies have also shown most tooth anomalies have occurred around the enucleated areas.
- ▶ With the long-term side effect, a person can come across: malocclusion, tooth invagination, mesial drifting from adjacent tooth, root and enamel defects or underdeveloped defects of adjacent tooth, diastema due to more spacing, underdeveloped or vault in palate, also including psychological defects due to unsatisfying appearance.
- ▶ Since this practice is being done on the children with pre-eruptive primary dentition; which causes alveolar bone to absorb, leaving the person with incapability to have implants in the future. This can lead to a person with very limited choices if they ever want to have their space to be filled up is by either orthodontic procedure or by getting a partial dentures.
- ▶ There are many factors contributing to the teething symptoms, and many healthier ways to relieve them. However, due to the lack of knowledge and education, communities choose this way to relieve the symptoms. Which is easy, quick and cheapest for them; not considering the factors of its adverse effects which can cause a person throughout their whole life.





# The Role of Dental Hygienist:

- Dental hygienists and other health care providers should be prepared to approach dental issues with vigilance depending on the severity of the conditions.
- The dental hygienists should be adopting to new methods to create awareness about such mal-practices and its long-term adverse effects. So that people are not offended regarding their cultural practices but learn from it and follow what is right for their well beings.
- There are brochures, pamphlets, leaflets and many other possible ways to relay information about the health of our dentition. The dental hygienist should accommodate people so that they have access to necessary information.
- In a respectful way, since it's a cultural ritual, the dental hygienist will have to be considerate about a person's cultural values and their emotions. As it might be a sensitive thing for the patients, including any psychological defects which are reflected on a person's appearance.
- Since this is a culturally-rooted issue, the help and support of local leaders will be crucial in educating their respective communities about the practice.

# The Role of Dental Hygienist:



- ▶ Parental education plays a crucial role in such practices, for which reason it's extremely important for the parents to have the right information to help end the practice in affected communities.
- ▶ Education to future mothers.
  - Pregnant women have their regular dental check-ups so there is a great opportunity to talk about child's erupting teeth. The symptoms the children present when they are on teething phase.
  - Create our own DH programs like breastfeeding have, which would focus in the importance of oral care from the beginning of child life. This could have great effect on children's oral health.
- ▶ Participate in (oral health or other health related) community events, being part of these events allow Dental Hygienist to reach and educate more people. Dental Hygienist can demystify dangerous myth like CBE with liable information and showing the effects that are caused by such ritual practices. During the participation, Dental Hygienist would highly likely come across such people that are more susceptible to these practices, also who are not able to get dental care; and help create organizations to invest in these areas to provide health and dental care.
- ▶ As a hygienist, it is extremely necessary for us to make our patient feel comfortable with us, who can trust us and be able to disclose all the necessary information which would help make the decision of the appropriate treatment plan according to the individual's need. And of course not to forget teach the patients how to brush and floss properly.



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