

The need for global safeguards for fundamental rights of children at risk of infant oral mutilation (IOM)

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INTRODUCTION

Not long ago in Kenya: A four-month-old boy was admitted into Emergency Department of a local hospital with severe haemorrhage and shock after a traditional gouging out, by a faith healer, of healthy primary canine tooth-germs without antiseptics, sedative or anaesthesia. The faith healer believed that he was offering a cure for non-specific childhood illnesses, with symptoms of fever, vomiting and diarrhoea. Efforts to resuscitate the child failed and he died within 6 hours of admission to hospital and 24 hours after the procedure was performed.

This scenario highlights a traditional practice called infant oral mutilation (IOM), which is commonly affiliated with many communities from the East and Central African regions. It is a practice with unproven benefits but with very harmful consequences.^{1–5} The practice involves the gouging out of developing primary canine teeth, as a panacea for non-specific childhood illnesses. The bulges in a child's gums, representing developing primary canines, are perceived to be 'tooth worms' responsible for childhood illness and must be removed to prevent the child from dying.²

FACTS AND MYTHS ABOUT INFANT ORAL MUTILATION

The practice of IOM takes place during a child's growth period of 4–18 months, which largely coincides with the age of 6 months when the child's immune system matures from the mother's passive immunity to self-innate immune system. The period also coincides with the time when the child weans from the mother's breast milk, as well as with the 'teething' period, when the child is usually exposed to external pathogens that can result in non-specific symptoms such as vomiting, diarrhoea, pain and fever,⁶ symptoms that are also known to be associated with IOM. Among

Summary box

- ⇒ Infant oral mutilation (IOM) is a painful traditional African dental practice carried out on children under 24 months of age when developing primary canines are gouged out in the belief that this would prevent or cure childhood illnesses.
- ⇒ The views expressed in this paper bring to the fore the dental and psychological trauma subjected to the child undergoing IOM, aside from bloodborne diseases, tetanus, HIV/AIDS and the fatalities associated with this traditional practice.
- ⇒ The need for more epidemiological research on IOM and immediate preventive and interceptive measures is apparent, aside from the need for urgent policy measures to eradicate IOM and safeguard the fundamental rights of susceptible children in IOM-practising communities.

the international dental and indigenous tribal communities, IOM is known by other alternative terms: tooth bud gouging,⁶ germectomy,⁷ nylon teeth mutilation, 'Ebinyo'/'Ebiino'/'Ebi-no'/'Nylon teeth',⁸ 'Two lak'/'telak'/'Gidog',⁹ 'Lugbara tooth' and 'Haifat'.¹⁰ Although the prevalence of IOM has varied within and without countries where it is practised, some of the documented ones have been from Ethiopia (38%–70%),⁴ Tanzania (0.5%–37%),⁸ Uganda (2%–30%),² South Sudan (70%–100%)¹¹ and Kenya (37%–87%).¹² Through the current human migration/mobilisation, the practice of IOM has been perpetuated beyond African borders, with its prevalence among Somali immigrants in England found to be 32%¹³ and among Ethiopian migrants in Israel at 59%.¹⁴ Case reports have also been documented among African immigrants in countries such as Australia,¹⁵ France¹⁶ and USA.¹⁷ It is possible that the stress due to migration among these immigrant communities could lead them to depression, reduced self-confidence, personal and family crisis, and low healthcare education



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and utilisation, making them turn to deep-rooted health behaviours such as IOM.¹⁴

Infant oral mutilation practice

IOM is undertaken either unilaterally or bilaterally in the dental jaws by traditional healers/herbalists, religious leaders, traditional birth attendants/other healthcare providers or family members using crude and non-sterile instruments. The instruments include sharpened stones, broken glass, bicycle spokes, umbrella spokes, knives, needles, nails, fingernails and razors.¹² Two IOM surgical approaches have been used based on the individual tribal community's preference. The first approach is non-destructive and involves lancing the gums over the bulge, representing developing primary canines, with a sharp, heated instrument until bleeding occurs,⁹ thus relieving non-specific symptoms of childhood illnesses.¹⁰ The second approach is more destructive and involves incising the developing primary canine bulge before enucleating/removing the whole healthy tooth bud.⁹ In some communities, mothers initially apply specific local herbs on their breast and their children's gum pad for a week prior to the IOM procedure, and additional herbs and honey are rubbed into the tooth socket after performing the IOM, to aid in wound healing.⁹ Nonetheless, the two methods used in the practice of IOM are not only traumatic, but are also undertaken in unhygienic/non-sterile environments, which expose the child to unnecessary infections and injuries to the soft tissues, developing primary and succedaneous canine teeth, and also to the adjacent primary and other permanent teeth.

Infant oral mutilation-related morbidity and mortality

Short-term complications

In the short term, IOM leads to the affected child not only being denied the necessary medical treatment for undiagnosed childhood illness, but also experiencing psychological trauma, pain, haemorrhage, soft tissue swelling, inflammation, trismus, tissue laceration, infections (tetanus, osteomyelitis, septicaemia) and even death, aside from upper respiratory infections, pharyngitis, tonsillitis, meningitis, otitis media, febrile convulsions, wheezy bronchitis, irritability and submandibular abscess.^{18 19} A study in Sudan indicated that 97% of children who had undergone IOM had been dehydrated and 11% had malaria, pneumonia and gastroenteritis, and in Uganda several hospital admissions for IOM cases showed the children had suffered from malaria, pneumonia, or gastroenteritis and malnutrition.¹⁷

Medium-term/long-term infant oral mutilation-associated complications

IOM has been associated with bloodborne diseases such as HIV and AIDS and up to 7%–87% of nutrition-related conditions^{12 17} such as Noma or cancrum oris.²⁰ Other conditions associated with IOM include dental hypoplasia (up to 35%), trauma, malformation and dilaceration of both deciduous canines and succedaneous canines,^{14 15 17} missing permanent canines and



Figure 1 An illustration of a child who has lost 73 and 83 as a result of IOM practice.

ectopic eruption of primary and permanent canines,¹⁴ and unnecessary loss of the targeted primary tooth/teeth (figure 1). Additionally, collateral loss/failure to develop/defective development/malposition or transpositions of the permanent canines, midline dentition shift, development of peg-shaped permanent teeth, occlusal discrepancies, and early eruption of permanent teeth have been reported.¹ Conditions such as dentoalveolar complications with malformed primary teeth, retention of primary teeth, development of odontoma-like structures, and displacement and impaction of permanent teeth have also been associated with IOM.^{17 15}

Infant oral mutilation-associated fatalities

In Kenya, a study of 115 infants/children attending a hospital after undergoing IOM showed that 58.3% required urgent admission for management of IOM-related complications: dehydration and shock (47.8%), pneumonia (40.3%), meningitis (26.9%) and generalised sepsis (17.9%). The study also reported mortality in seven children (6.1%; 3 dead on arrival and 4 died on the paediatric ward).²¹ In Uganda, past hospital studies reported that children admitted for treatment after undergoing IOM had fatalities of 21% and 22%.¹⁹ We believe that these figures are grossly underestimated due to non-existence of a reliable reporting process for child death in most low-income countries.

Globalisation of infant oral mutilation

Increased immigration/mobilisation from the African continent to high-income countries over the last 20 years has included immigrants from these indigenous African communities with deeply rooted IOM practice. These immigrants represent a small but fast-growing population, keeping this superstitious tradition alive in their

adopted countries. Countries with African immigrants that have reported cases of IOM include UK, Sweden, USA, Canada, Australia, New Zealand and Israel.¹ In countries where the laws prohibit this kind of harmful practice, the immigrants have often made a return trip to their motherland to undertake IOM on their children.¹³ Therefore, it is important to raise IOM awareness among healthcare providers so that they can respectfully and routinely enquire about IOM from their patients and counsel them, and be prepared to deal with any health emergencies arising from the practice of IOM and other IOM-related dental complications.

Infant oral mutilation and other traditional African practices

There are many other traditional African practices. In the East and West African regions, for example, one such traditional practice that appears to have some commonalities with IOM, including being a harmful, deeply rooted cultural and traditional practice, is female genital mutilation/cutting (FGM/C), performed mainly by local herbalists and traditional birth attendants under non-clinical settings using unsterile instruments. However, the reasons for performing the two practices are quite different. Further, FGM/C is more widespread in African communities in West Africa,²² whereas IOM is more widespread in the African communities of the East and Central regions, where it appears as a subsector of the predominant FGM/C practice, particularly in the geographical areas of Burkina Faso, Chad, Democratic Republic of Congo, Ethiopia, Kenya, Somalia, Sudan, Tanzania and Uganda,^{16 23 24} as shown in figure 2.

Nonetheless, FGM/C is a criminal offence in some low-income and high-income countries, for instance in the UK where, from 1985, the offence has extended to non-UK nationals or residents performing FGM outside the UK on UK nationals or permanent residents, who face a prison sentence of between 4 and 14 years.²⁵ In Africa, Burkina Faso and Mauritania have lower incidence of FGM/C due to existing national programmes enhancing community education and awareness and enforcement of existing laws against FGM/C.^{26–28} Kenya criminalised FGM in 2011, while the neighbouring Tanzania continues to deal with FGM under the Sexual Offences Special Provision Act of 1998, which criminalised FGM on girls under 18 years. However, the practice is still rife in these two countries due to lack of awareness and enforcement mechanisms of the existing laws.

Unfortunately, IOM does not enjoy such legal provisions as FGM/C, even in countries that have criminalised FGM/C and also have communities practising IOM. In an effort to work towards the eradication of IOM, in 2019, representatives from seven East and Central African countries, meeting in Addis Ababa under the umbrella of the Paediatric Dentistry Association of East Africa and Global Child Dental Fund, agreed upon and signed a regional declaration and action plan to end IOM in East and Central Africa within 10 years. They appealed to the African Union and global partners to support national

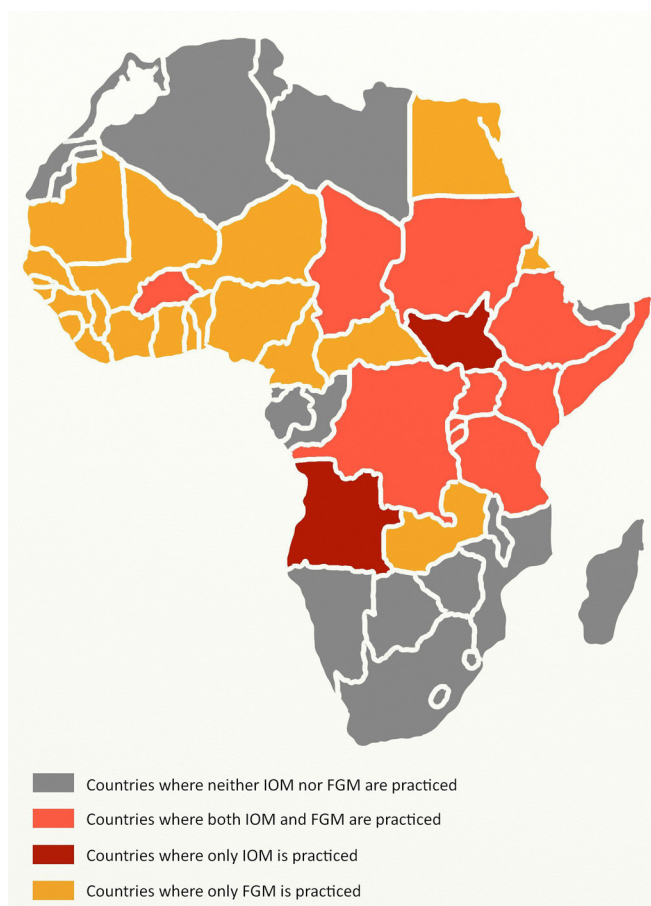


Figure 2 Map of Africa showing countries where both FGM/c and IOM are not practised (Grey colour), where both FGM/C and IOM are practised (Red colour), where IOM only is practised (Maroon colour) and where FGM/C only is practised (Orange colour). FGM, female genital mutilation; IOM, Infant oral mutilation.

efforts to eradicate IOM, through support for establishment of a leadership programme to beef up campaigns against IOM.²⁹ While the declaration reinforces the serious concerns IOM has on children in the region, it will take great efforts, finances and the goodwill of national governments and intranational stakeholders to push the agenda through and eradicate IOM. The hope rests on the strides made to reduce FGM/C in West Africa, especially Burkina Faso and Mauritania, and the possibility for similar strategies to be replicated in the East and Central African regions to help end IOM. Enaction of laws and their enforcement may act as a deterrence, but there is also a need for additional high-level global awareness campaigns on IOM among healthcare professionals and the public.³⁰ The need for such public health campaigns condemning IOM through educational posters and creating school-based programmes that advocate for not just good oral health but also educating children (future parents) on the dangers of IOM is dire.

CONCLUSION

IOM is a serious and hidden global public health problem and a form of abuse to children, with short-term and

long-term implications on the quality of life of African children. IOM goes against the United Nations Convention on the Rights of the Child (1989) Articles 2(2), 3(1) and 24(3). The issue on IOM requires global consensus in taking strong measures to eradicate this practice and safeguard the fundamental rights of all children at risk. These measures should include but not limited to national legislation and policies against the practice of IOM in both high-income and low-income countries.

While we recommend inclusion of IOM in the undergraduate curriculum for medical and dental students in low-income and high-income countries, urgent public health education for both healthcare professionals and communities practising IOM will, in the short term, help to stem the tide in IOM. We also recommend high-profile publicity for eradication of IOM, including educational programmes for politicians and the public in both high-income and low-income/medium-income countries to support actions geared to safeguarding the interest of young children in their native countries or those transported from high-income countries to their native African countries for IOM.

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