

of breach in ethical practices may be questioned, in the case where such a study does seem to find its way into published literature, there needs to be a framework in place for dealing with such work.

For better or worse, citation counts tend to dictate the quality or 'impact' of research which affects everyone from authors, journals to the institutes associated with the research.

Historically, it has been a moral debate whether to cite research such as that conducted in Nazi concentration camps. Would citing such research legitimise it? Questions whether such data are morally neutral or whether they should be treated differently from other data have certainly been raised in the past.<sup>2</sup>

With rapid changes in technology and an increased involvement of institutes other than traditional universities in research, there has also been increased interest in the ethical issues surrounding contemporary research practices. A rise in global collaborations means more people from varying backgrounds become involved in research which could create ethical and moral dilemmas based on culture and background.

Recently, Retraction Watch, in collaboration with Zotero, started offering a tool to alert users of any retracted papers in their personal libraries.<sup>3</sup> Retractions, however, if they happen, may take protracted periods of time, based on a number of factors. The research community in general should be encouraged to flag the possibility of unethical practices in research without fear of ridicule or detrimental consequences. Institutional- and publisher-level frameworks for flagging such issues would go a long way in promoting awareness and inculcating a culture of attention towards ethical practices in research.

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## References

1. Kramer A D, Guillory J E, Hancock J T. Experimental evidence of massive-scale emotional contagion through social networks. *Proc Natl Acad Sci U S A* 2014; **111**: 8788–8790.
2. Sheldon M, Whitely W P, Folker B, Hafner A W, Gaylin W. Nazi data: dissociation from evil. *Hastings Cent Rep* 1989; **19**: 16.
3. Retraction Watch. Want to check for retractions in your personal library – and get alerts – for free? Now you can. 12 June 2019. Available at: <https://retractionwatch.com/2019/06/12/want-to-check-for-retractions-in-your-personal-library-and-get-alerts-for-free-now-you-can/> (accessed March 2023).  
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## Cultural dentistry

### Adolescent oral modification

Sir, teeth mutilation is referred to as intentional trauma and tooth modification. Infant oral mutilation (IOM) is a well-known ritual ceremony, mostly practised in Africa, in which the primary tooth bud of the deciduous canine is extracted.<sup>1,2,3</sup> Other forms of ritual tooth deformation (eg tooth avulsion, filing) can still be found today, especially in the Amazon region, Central and Southern Africa, and also in Southeast Asia.<sup>4,5,6</sup> The aim of this letter is to describe the ritual filing of the upper incisors and canines to make them even, as practised on the island of Bali. This ritual (called in Balinese language *mepandes* or *matatah*) is performed regularly on adolescent boys and girls at the onset of puberty, if they are members of the special Bali-Hindu-Religion.

In Bali, it is overseen by a Hindu priest or priestess (the *pedanda* or *pemangku*). After ritual cleansing of the participants with consecrated water, the priest writes two sacred syllables on the two upper canines. These two syllables (*ang-ah*) symbolise the polarity of the world. The priest then carefully works on the six upper front teeth using a small hammer and chisel, marking out the boundaries of the area to be filed

(Fig. 1). In the final step, a respected man files the incisors and canines down with a fine metal file (Fig. 2) so that these teeth are all level. No anaesthetics are administered during this procedure.

In Bali, the upper canines and incisors are regarded as the seat of the six main *sad ripu* (human vices): *krodha* (anger), *kama* (lust), *loba* (greed), *madha* (lack of self-control), *moha* (stupidity) and *matsarya* (jealousy), and filing the teeth is necessary to combat them. We propose calling this initiation rite among young Balinese Adolescent Oral Modification (AOM) to distinguish it from IOM.

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## References

1. Dinur N, Becker T, Levin A *et al*. Long-term dental implications of infant oral mutilation: a case series. *Br Dent J* 2021; **231**: 335–340.
2. Wordley V, Bedi R. Infant oral mutilation in East Africa: eradication within ten years. *Br Dent J* 2019; **226**: 14–15.
3. Garve R, Garve M, Link K, Türp J C, Meyer C G. Infant oral mutilation in East Africa – therapeutic and ritual grounds. *Trop Med Int Health* 2016; **21**: 1099–1105.
4. Erlandsson A L, Bäckman B. A case of dental mutilation. *ASDC J Dent Child* 1999; **66**: 278–279.
5. Pindborg J J. Dental mutilation and associated abnormalities in Uganda. *Am J Phys Anthropol* 1969; **31**: 383–389.
6. Pinchi V, Barbieri P, Pradella F, Focardi M, Bartolini V, Norelli G A. Dental ritual mutilations and forensic odontologist practice: a review of the literature. *Acta Stomatol Croat* 2015; **49**: 3–13.

<https://doi.org/10.1038/s41415-023-5810-0>



Fig. 1 A female 17-year-old and male 18-year-old in Bali, marking out the boundaries of the area to be filed (left); filing the incisors and canines down with a fine metal file (right)



Fig. 2 Dental status of a 24-year-old Balinese man four years after AOM