

Health care providers' perceptions on harmful traditional health practices in Ethiopia

Anders Jeppsson¹, Mequanent Tesfu², Lars-Åke Persson³

Abstract

Background: More knowledge is needed about traditional surgical procedures performed in African countries, and the complications caused by such practices.

Objective This paper describes the frequency of traditional surgical health practices and their adverse physical health effects in various regions of Ethiopia, as interpreted by a representative sample of health workers.

Methods: A list of health practices was presented to 97 health workers sampled from all but 2 regions in Ethiopia. They were asked whether these practices, to their knowledge, were carried out in their respective catchment areas and whether they had observed any physical complications.

Results: According to the perceptions of the health workers, the frequent practice of female genital mutilation was confirmed, and in addition practices such as milk tooth extraction, uvulectomy, uterus massage and tonsillectomy were prevalent. The most commonly reported complications were infections, followed by bleeding. Most of these traditional surgical procedures resulted in frequent and sometimes fatal complications.

Conclusions: The findings call for preventive strategies, where the health sector may play an important role. [*Ethio.J.Health Dev.* 2003;17(1):35-44]

Background

Traditional surgical practices, like female genital mutilation, have been performed during a number of centuries in several geographical areas (1, 2). Bleeding and cupping were reported from Ethiopia already during the 19th century (3). Other practices may be specific to one geographical area, e.g. rectal ulceration, which so far only has been reported from Ethiopia (4).

In Ethiopia a few studies have assessed the occurrence of different traditional surgical procedures (4, 5, 6), but there is still limited information available about the health workers' perceptions on possible benefit or harm caused by these practices (4, 5). The serious health consequences of female genital mutilation, which is reportedly performed on a vast majority of Ethiopian women (5, 7), were more frequently occurring among those who had undergone more serious forms of mutilation, like excision and infibulation (8). In surveys among health workers in Ethiopia (4, 5) most interviewees had experience of other traditional surgical practices from their local communities, e.g. male circumcision, milk tooth extraction, tattooing, cauterisation, cupping and scarification. Procedures like rectal ulceration and blood letting were less commonly reported, while uvulectomy and milk tooth extraction were common in the northern part of the country. Thus, in addition to female genital

¹Department of Community Medicine, Lund University, Sweden & Department of Community Health, Mbarara University of Science and Technology, Mbarara, Uganda; at the time of the study Family Health Department, Ministry of Health, Addis Ababa, Ethiopia; ²Family Health Department, Ministry of Health, Addis Ababa, Ethiopia; ³Division of Epidemiology, Department of Public Health and Clinical Medicine, Umea University, Sweden

mutilation a number of other traditional surgical procedures are practised in Ethiopia. There is a need to get more knowledge about the perceptions of these practices among health professionals, and experiences of complications and negative health effects caused by such procedures. The aim of this paper is therefore to assess the frequency of surgical health practices in various regions of Ethiopia, as interpreted by health workers, to investigate possible adverse physical health effects, and to discuss possible means of intervention against harmful practices.

Methods

This questionnaire-based study was linked to an Ethiopian reproductive health survey in 1995. A two stage stratified type of sampling

procedure was used for the study. Accordingly, all the 11 Ethiopian regions except two were covered by the study. According to a decision by the Ministry of Health the regions of Afar and Benshangul were left out because of a low number of health facilities.

In the second stage, hospitals, health centres and number of health stations were randomly selected from each region (21 hospitals, 25 health centres and 51 health stations). The final selection of health stations was randomly done while in the respective regions, since no registers of health stations were available at central level. The number of health facilities selected was based on the total number in the respective region.

Table 1: **Health Facilities studied**

Region	Hospitals	Health centres	Health Stations (number)
Addis Ababa	Yekatit 12 Police	Akaki Lideta	6
Tigray	Mekele Axum	Mekele Tembien Wukro	6
Amhara	Woldia Debre Berhan Dessie Gonder	Debre Sina Lalibella Kenissie Chilga Este Bahar Dar	11
Oromia	Dembidello Aira Ambo Jimma Asebeteferi	Wollisso Nekemte Ziway Nazret Assella Gimbi Ejaj Bokoje Mojale	19
Somali	Jidjiga Kararda		1
Southern Ethiopia	Attat Arbaminch Hossaina	Yirgalem Sawella Konteb Butajira	8
Gambella Harar Dire Dawa	Gambela Hiwot Fana Del Chora	Itang	1

One knowledgeable staff member from each health institution was to be selected to answer the questionnaire. For hospitals and health centres outpatient department the intention was to select a nurse, while for the health stations a health assistant was to be interviewed.

Based on published reports and other available information at the Family Health Department of the Ethiopian Ministry of Health a list of relatively common traditional surgical or other health care related procedures was created. The purpose was to assess, whether a link could be established between a certain set of traditional practices on one side and medical complication on the other. Some known practices, like the insertion of lip-plates, were deliberately left out since they, although common, were restricted to certain geographical areas.

The interviewees were asked if they had experienced such practices within their own geographical area, if they had observed any complications, if they perceived any potential harm and benefit, and possible explanations and rationale for these surgical procedures. The interviewees were specifically asked to report from their own observations and experiences, and not from general knowledge or perceptions.

They were also asked to suggest actions and interventions against practices they considered harmful.

The following traditional practices were included in the questionnaire:

Female genital mutilation: The most well known type of traditional surgical practice.

Milk tooth extraction: According to traditional beliefs diarrhoea and fever at the time of milk tooth eruption may be due to worms in the gum (9). This can be dealt with by having the teeth extracted or, rather, the gum being drilled and

the primary teeth or the new, permanent teeth extracted or carved out. The practice of milk tooth extraction is also reported as a treatment of poorly growing older children (4). This practice is reported to cause osteitis and osteomyelitis (6).

Uvulectomy: The uvula is thought to cause oropharyngeal blockage (6). In addition, prolonged swelling of the throat, vomiting and coughing in children as well as in adults are attributed to an inflamed uvula (10). The uvula is often snared with a loop-ending string and then cut with a knife (11). Haemorrhage and infections, including tetanus, are reported as complications.

Incision of eye-lid is known as a treatment of eye diseases, especially as a treatment of eye infections (4, 6). It is carried out with a razor blade, and is often resulting in secondary skin infections and in excessive bleeding (6).

Tonsillectomy: Sore throat, difficulties in swallowing and coexistence of seizures with these conditions are often attributed to illness of the tonsils. The tonsils are sometimes enucleated by the index finger of the healer (10). A related practice is scraping a sore throat with a long finger nail (9). Bleeding indicates the success of the operation. Haemorrhage, infection, suffocation and death are known complications.

Blood-letting through vein puncture on scalp (wagemt). The rationale behind blood-letting is that the body is decaying internally, causing tissue swelling and deteriorating health. This can be dealt with by removing blood. It is especially prescribed for elephantiasis, rheumatism, high fever and headache (11). Travellers to Ethiopia have described bleeding techniques since ancient times (3, 4).

Venesection on arms (mognebegegne). Besides the rationale for bleeding techniques described above, venesection has also been described as a treatment for meningitis. Also arteries are sometimes stabbed to get blood out of the patients (4).

Cauterisation (tattate): Ailments such as conjunctivitis, headache, ear infections, tuberculosis and bone fractures are sometimes treated with cauterisation (burning with hot matter). In the highlands it is also used for joint pains. The rationale is the belief that intense heat destroys the pathogenic substance inside the body. Although the modalities of the procedure differ, it is usually carried out with hot charcoals, a hot iron or a burning stick (11).

Uterus massage: Kneading and squeezing a woman's abdomen with the intent to massage the uterus, is a widely used practice to induce labour. It may prolong labour and cause bleeding and uterus rupture (9).

Rectal ulceration: The practice of rectal ulceration is known as a treatment of whipworm (*Trichuris trichiura*) (4). It is reportedly also carried out as a treatment against diarrhoea. Little information is available on this practice.

Ethical clearance for the study was obtained from the Ministry of Health. Informed consent was obtained from all participating health personnel. Data were stored and processed by use of Epi Info epidemiological software (12).

Results

Overall 97 interviews were undertaken. In a few cases it was not possible to visit the health units selected due to logistical problems. 51 health assistants were interviewed at the selected health stations. Out of the remaining 46 interviewees, the vast majority were nurses, with the exception of a few physicians.

What kinds of practices are undertaken in this area?

The interviewed health personnel recognised that most of the listed traditional surgical procedures were being performed in their own areas.

Uvulectomy was concentrated as previously shown, to the northern parts of Ethiopia, although it seems to be common in most areas of the country. The practice was neither reported from Somali nor from Gambella.

Female genital mutilation is practiced in most areas in the country. As previously known, Gambella is one exception. Slightly surprising is that the reported frequency is not higher in Tigray. Other authors have attributed high prevalence to this region.

Rectal ulceration is, as previously reported, not one of the most common practices, but does exist in some regions, with a focus in the eastern part of Ethiopia.

The practice of milk tooth extraction is frequent, and reported from all areas surveyed. All surveyed regions reported that this practice was carried out.

Little is found in the literature on eye-lid incision, and although it is not one of the most common traditional practices, the study showed that the practice is being carried out all over the country, with the exceptions of Gambella, Somali and Dire Dawa. It is also found to be rather frequent, especially in the north (Tigray) and in Harrar. There is a very uneven distribution of the practice over the country.

There is a concentration of vein puncture to Tigray, Amhara and Oromia, i.e. in the northern and central parts of the country. The occurrence in Addis Ababa may be due to a strong influence of these ethnic groups.

Table 2: Occurrence of harmful traditional practices by region, as recalled by health personnel

Type of traditional practice	Total	Tigray	Amhara	Oromia	Somali	Southern	Gambella	Harrar	Addis Ababa	Dire Dawa
Uvulectomy	80 82.5%	11	20	25	0	13	0	1	9	1
Female genital mutilation	72 74.2%	4	18	28	2	13	0	1	5	1
Milk tooth extraction	84 86.6%	10	18	27	2	13	3	1	9	1
Rectal ulceration	5 5.2%	0	2	1	1	0	0	0	0	1
Incision of eye-lid	32 33.0%	11	6	7	0	5	0	1	2	0
Vein puncture on arms to get rid of illness (mognebegegne)	33 34.2%	9	15	6	1	0	0	0	2	0
Blood letting through vein puncture on scalp (wagemt)	25 25.8%	7	7	3	2	2	1	0	2	1
Tonsillectomy	53 54.6%	3	11	17	2	12	0	1	6	1
Cauterization (Tattate) treatment by burn with an iron rod	50 51.5%	9	8	16	2	10	0	0	4	1
Birth practices, uterus massage	56 57.7%	9	10	18	1	11	1	1	5	0
Number of health workers surveyed (n)	97	11	21	32	2	17	3	1	9	1

The distribution of blood letting on the scalp shows a slightly different pattern than venesection on the arms. Still frequent in the highlands (Amhara and Tigray), it is even more frequent in the west (Dire Dawa and Somali).

Tonsillectomy is common in most areas of the country with Gambella as the single exception. It is overall very common.

Cauterization (burning of the skin by hot matter, e.g. an iron rod) seems to be most common in the west (Dire Dawa and Somali).

As previously shown, it is also very common in Tigray, Oromia and Amhara.

The practice of uterus massage is common all over Ethiopia. Harrar reveals the highest frequency.

Have you observed any adverse health effects from these practices?

If a health worker reported about a certain traditional health practice being undertaken in

Table 3: Complications due to harmful traditional practices if known to be practised in the area, as recalled by health personnel

Type of harmful traditional practice	Frequency
Milk tooth extraction	100%
Rectal ulceration	100%
Incision of eye-lid	100%
Birth practices, uterus massage	98%
Female genital mutilation	98%
Cauterization (Tattate) treatment by burn with an iron rod	97%
Uvulectomy	95%
Tonsillectomy	95%
Blood letting through vein puncture on scalp (wagemt)	94%
Vein puncture on arms to get rid of illness (mognebegegne)	90%
Number of health workers surveyed (n)	97

the catchment area, the same health worker was asked whether he or she had observed complications due to the practice in question. We are now dealing with first level information, i.e the experience of the health workers themselves.

As indicated above, the reporting of observed complications due to traditional practices were

overall high. All investigated practices reportedly resulted in high complication rates.

The interviewees were asked specifically in what way the practices were harmful, and what particular kinds of complications they had observed.

Table 4: Health personnel's report on the complications observed to traditional surgical procedures in their own area in Ethiopia (n=97)

Traditional practice	<i>Most common complications</i>
Milk tooth extraction	Infection, even tetanus and sepsis, bleeding, damage of permanent teeth
Uvulectomy	Infection (even sepsis, tetanus, HIV), bleeding, death
Female genital mutilation	Bleeding, infection, delivery complications, anaemia, death
Uterus massage	Rupture of uterus, maternal death, bleeding, stillbirth, foetal distress, bladder rupture, abruption of placenta
Tonsillectomy	Infection (including tetanus), bleeding, breast feeding difficulties, death
Cauterisation	Infection (also tetanus), scar formation, nerve paralysis
Venopuncture	Severe bleeding, anaemia, infection, HIV, death
Incision of eye-lid	Infection, scar, bleeding,
Rectal ulceration	Damage of sphincter, rectal prolapse, bleeding, infection

In short, all the surveyed practices seemed to have hazardous effects to health. This was the clear message obtained from the interviewees.

Other types of traditional practices mentioned with complications

In addition to the checklist with practices presented to the health workers, the health workers were asked to identify other harmful traditional practices undertaken in the catchment area. They were also asked what type of complications that are normally presented as a result of the practice in question.

The information obtained for other types of health practices deemed harmful by the interviewees, was based on open-ended questions. Hence there is no clear focus on surgical or skin-piercing practices. All types of

health practices are included. It is interesting to see that a few practices that appear here, like uncleanness in conjunction with umbilicus care, result in serious complications like tetanus.

Table 5: **Type of traditional practices mentioned with complications.**

Type of practice	Complications	Frequency
Removal of nails	Ticked, but not specified	1
Drinking local kosso (taenicide) on wedding day		
Herbs	Loss of weight	1
	Subsequent risks	1
	Body rash	1
	Epigastric pain	2
	Diarrhea	1
	Hepatitis	1
Early starting of food < 4 months like butter, cow milk	Malnutrition	1
	Infections & parasites	
Incision of glands	Bleeding	1
	Anemia	
	Infection	
Application of herbs on burn wounds	Infection	1
	Fever	
	Septicemia	
Dung on the umbilicus	Tetanus	2
Mud on the umbilicus	Tetanus	1
Tenkway (professional sorcery)	Impaired health	1
	Death	
Sucking blood	HIV risk	1

According to the opinions expressed by the participating health workers the frequent practice of these traditional surgical procedures had its roots in ignorance, and lack of information on western medical views on appropriate treatment. Illiteracy was specifically mentioned as a contributing factor. A group of answers focused on explanations related to traditional values and influence from tradition keepers in society, especially religious and community leaders, ‘... *this has been going on for generations*’. Another level of explanation focused the lack of access to modern health care, or the lack of quality of care, leaving the individual without realistic alternatives to traditional treatments. Finally, the respondents stated that traditional health practices were not under the supervision by the authorities, presumably making this a more attractive alternative.

The health workers suggested increased health education to various groups in the community in order to reduce the practice of these harmful procedures. In addition, an intensified discussion with religious and community leaders was given priority. Training of community health workers and traditional birth attendants was also mentioned, as well as other ways of improving the collaboration between the health workers and the community. The prevalent performance of harmful practices also called for improvements in the service provided by health facilities in rural areas. Finally, some health workers wanted the government to increase the control of the traditional practices in the country.

Discussion

This study has demonstrated that a number of traditional surgical interventions was commonly practised in Ethiopia, and frequently

resulting in serious and life-threatening complications. The frequent practice of female genital mutilation was confirmed, and in addition practices such as milk tooth extraction, uvulectomy, uterus massage and tonsillectomy were prevalent. The focus of the study is not to confirm the existence of the traditional practices in question, but rather to explore the medical complications in an Ethiopian context.

The study aimed at establishing whether the listed procedures were practised or not in the different geographical areas, and not the level of occurrence in the population as such. The strategically selected health workers, representing different areas in proportion to the size of the areas, may be an appropriate source of information for that type of question. They were specifically asked to report from their own observations and experiences, and not only from general knowledge or perceptions. Thus, the information obtained is probably reflecting if these traditions are implemented in the areas, and if complications have been observed at the health institutions. The findings are applicable to the Ethiopian context, but may also be relevant in other cultural settings, whenever the prevalence of disability, occurrence of death and costs linked to harmful traditional practices are discussed.

We have demonstrated that drastic surgical and other traditional procedures, e.g. uterus massage, were performed in many areas of Ethiopia. While studies on traditional health practices previously have focused female genital mutilation, other customs affecting women and children have received little attention. Several of the listed practices, e.g. uvulectomy and milk tooth extraction, were

found in most geographical areas, while others, like rectal ulceration, were more geographically restricted.

It should be noted, that HIV was reported as an observed complication to two of the practices (uvulectomy and venesection). To our

knowledge, this has not been previously shown, and the finding warrants further in-depth studies.

Whereas a number of authors have described the frequency and the complications of female genital mutilation (1, 5, 8) information on other types of drastic surgical practices are more based on individual case reports rather than larger surveys. This study covers some of the major drastic surgical interventions throughout most of Ethiopia. The reports on occurrence of these practices confirm previous case reports that we have found. In addition, we have found that these practices often result in complications adverse to health, an observation that may seem logical, but previously overlooked. The overall conclusion from this study is that the practices in question seem to be common and, more importantly that resulting complications also seem to be frequent. It should be noted, that only few interviewees mentioned the risk of spreading infections through surgical practices. In a time when serious chronic infections, like HIV and hepatitis are prevalent, there is reason to address issue more specifically.

Lack of health facilities and modern health services may contribute to the performance of a number of traditional surgical health practices, but maybe not to female genital mutilation, since the latter is usually not perceived as being related to health (13, 14). A recent study in rural Ethiopia reported a low usage of health care in spite of a huge burden of perceived, indicating large unmet needs facing the health delivery system (15). In a milieu where modern health care is not available, decisions concerning health are influenced by the fact

that people must create different ways to handle disease. This further means that different models for explaining disease are naturally created and maintained.

In a longer perspective, a transformation of the Ethiopian society is likely to bring a change to

these practices. However, such a transformation cannot be considered a prerequisite for change. That would rather be an excuse for not addressing these issues. An improved coverage of the health services will probably contribute to a reduced importance of traditional practices and consequently reduce the practice of harmful traditional surgical procedures. This will be a process where peoples' conceptualisation about health is likely to change, and concepts of modern medicine will be incorporated in people's perception of health and disease. The issue is not only the provision of modern medical care, but also to promote a change in knowledge and perception of health and disease.

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