ORIGINAL ARTICLE

HARMFUL TRADITIONAL HEALTH PRACTICES: A CROSS – SECTIONAL SURVEY AMONG UNDER-FIVE CHILDREN IN DEMBIA DISTRICT, NORTH-WEST ETHIOPIA

Getu Degu Alene[1]

ABSTRACT

Background*: Harmful Traditional Health Practices such as, female genital mutilation, uvulectomy, tonsillectomy and milk teeth extraction are widely practiced in Ethiopia. These malpractices are associated with risks like massive bleeding, infection, transmission of many diseases including HIV/AIDS. There is evidence that the type and degree of malpractices vary from one place to the other in the country requiring the need for the undertaking of area-specific researches.*

Objectives: *To determine the prevalence rates and associated risk factors of harmful traditional health practices among under-5 children of Dembia district, north Gondar zone.*

Methods: *A cross-sectional study was conducted in Dembia district, northwest Ethiopia which included both urban and rural settings. Data were collected from 1214 households which consisted of 1747 under five children using a pre-tested questionnaire.*

Results *: Uvulectomy, giving butter to a newborn baby as the first feed, and milk teeth extraction were the most dominant malpractices reported by the respondents. Among the various socio-demographic characteristics considered, the level of education attained by the mother, place of residence and religion were found to be significantly and independently associated with the practice of the most prevalent harmful traditions that the under 5 children had undergone. As the level of educational status of the mother increased, there appeared a corresponding decrease in the practice of harmful traditional health practices among under 5 children. Children below five years of age living in rural areas were about 1.8 times more likely to be exposed to the risk of harmful traditional health practices compared to those residing in towns (AOR = 1.8; 95% CI: 1.02, 3.16). The Orthodox Christians were also observed to be about twice more likely to undergo the traditional malpractices than the Muslims of the district. The practice of female genital mutilation was observed only among the minority groups of the district.*

Conclusions: *The high prevalence rates of harmful traditional health practices coupled with the use of unsterilized tools calls for an appropriate measure. Among others, the banning of the most harmful traditional health practice (female genital mutilation) is recommended.*

Keywords: *harmful traditional health practices, under 5 children, HIV/AIDS, prevalence rate and associated factors, Dembia district*

INTRODUCTION

In every culture, there prevail important practices which perpetuate community cohesion and transmit traditional values to subsequent generations. While many traditions promote social cohesion and unity, others erode the physical and psychological health and integrity of individuals, particularly that of children and women. Factors such as limited access to education, information, and modern health services, coupled with poor socio-economic status of the population are responsible for the persistence of the most harmful health practices (1-3).

Harmful Traditional Health Practices (HTHPs), like female genital mutilation (FGM), are performed in at least 26 African as well as in some Arab and Asian countries and among immigrant communities in Europe, Australia, and the United States. It is estimated that at least 2 million people are at the risk of female genital mutilation every year (1, 4-6).

FGM comprises all procedures involving partial or

[1] *Department of Epidemiology & Biostatistics, College of Medicine and Health Sciences, University of Gondar, P.O. Box 196, E-mail: adgetu123@yahoo.com, Gondar, Ethiopia*

total removal of the external female genitalia or other injury to the female genital organs for cultural or non -therapeutic reasons. In 1995 the World Health Organization developed the following four broad categories for FGM operations (6):

Type I: Excision (removal) of the clitoral hood with or without removal of part or all of the clitoris.

Type II: Removal of the clitoris together with part or all of the labia minora.

Type III (infibulations): Removal of part or all of the external genitalia (clitoris, labia minora, and labia majora) and stitching and/or narrowing of the vaginal opening leaving a small hole for urine and menstrual flow.

Type IV (unclassified): All other operations on the female genitalia, including pricking, piercing, stretching, or incision of the clitoris and/or labia; cauterization by burning the clitoris and surrounding tissues; incisions to the vaginal wall; scraping (angurya cuts) or cutting (gishiri cuts) of the vagina and surrounding tissues; and introduction of corrosive substances or herbs into
the vagina.

These procedures are not reversible, and their effects last a lifetime. Types I and II account for up to 85% of FGM operations. Type III is common throughout Djibouti, Somalia, and Sudan, as well as in parts of Egypt, Ethiopia, and Kenya. Health consequences of FGM seem to vary according to the type and severity of the procedure. Complications may range from immediate, such as bleeding and shock, to a wide range of longer-term problems for women and their newborn children (1, 3-5).

In Ethiopia, in addition to the most serious forms of traditional surgical procedures (that is, FGM), other HTHPs, such as uvulectomy, tonsillectomy, milk teeth extraction, cosmotic tattooing, and eyebrow incision are widely practiced with no or little attention to hygiene (3, 7 - 9). A study undertaken in Gondar area (Ethiopia) nearly two decades ago showed a 99% prevalence rate of uvulectomy among under five children (10). Uvulectomy is a traditional surgery performed on infants and children. In the procedure, the uvula is first snared into a loop-ending string and then cut with a special blade prepared for that purpose. This procedure results in the partial or complete removal of the uvula. It is usually done as a traditional treatment to prevent throat infections. Eyebrow incision is performed to treat conjunctivitis and other eye infections, and tonsillectomy (excision of the tonsils) is thought to prevent any illnesses attributed to the tonsils. It has been postulated that these harmful traditional health practices can play a significant role in facilitating the transmission of HIV infection (4, 7, 11).

Although the few studies conducted in Ethiopia have shown the occurrences of different HTHPs, the distribution and prevalence rates of these HTHPs in many parts of the country are not well documented (7,8). As HTHPs are important health problems, it will be appropriate to study the distribution and magnitude of such malpractices in as many parts of the country as possible. In this regard, in order to come up with mechanisms which will reduce (eliminate) these HTHPs and their associated risks, area specific related studies should be initiated and undertaken.

Therefore, this study is aimed at determining the prevalence rates and associated risk factors of the most prevalent HTHPs among under five children in the District of Dembia, northwest Ethiopia.

SUBJECTS AND METHODS

This cross-sectional survey to determine the prevalence rates of harmful traditional health practices and the associated determinant factors among under-five children was undertaken in April 2005 in the District of Dembia, northwest Ethiopia. This District consists of 44 localities (4 urban and 40 rural). During the survey of the present study, the total population was estimated at 278,000 as projected from the 1994 census of the District (12) and the number of children below five years of age was about 48,000 (13).

A random sample of 14 localities (three urban and eleven rural) that comprised about 33% of the entire population was considered in this study. From each selected urban and rural locality, a sample of 75 to 100 households (with at least one child below five years of age in the selected household) was taken by simple and systematic random sampling techniques. Either of the above two sampling schemes was used to select the required households depending on the specific situation of the given locality. For those localities whose sampling frames were available (e.g. towns) and those rural localities where numbering of the households could be easily given, a simple random sampling technique was applied. On the other hand, in rural localities where the houses were scattered and their arrangement had a feature of a straight line, a systematic random sampling was used. Ac-

cordingly, simple random sampling was applied in the seven rural and three urban localities while systematic random sampling was used in only four of the rural localities. The number of households taken from each locality was determined on the basis of proportional allocation to the size of the population (households) of the given locality. In this study, the term locality refers to the smallest administrative unit in urban or rural areas of the district.

The assumptions made for the sample size calculation were: a 95% confidence interval (two-sided), a 3% margin of error and a 52% proportion of undergoing the malpractice of tonsillectomy among children (14). Because the present study had several outcome variables, the one (the prevalence rate of tonsillectomy as obtained from the Dabat District) that gave a relatively larger sample size was taken into consideration. Accordingly, with the addition of 15% for non-response and other contingencies, a total sample size of 1226 households was initially proposed. However, twelve houses were closed (even after repeated visits) at the time of the survey and that accounted for a non-response rate of 1%. Further investigations made on these households indicated the fact that the unavailability of the individuals to whom these houses belonged was due to own personal reasons not related to this particular study.

Data collection was undertaken by ten individuals who had completed high school. These interviewers who were recruited from the same district had some experience of data collection in related sample surveys conducted in the area. A two-day intensive training on how to interview and collect the required data was also given to these data collectors. All procedures including the supervision of data collectors that would take place at the time of the survey were made clear to the participants of the training. In this regard, three health professionals who were selected from Kola Diba Health Center were assigned to supervise and assist the data collection process and the overall activity was co-ordinated by the investigator.

Apart from following the smooth process of data collection, the supervisors were also responsible to carry out a reliability study on a small number of randomly selected households. Accordingly, seven to ten households from each locality were re-interviewed by the supervisors to ensure the accuracy of data collected by the team.

A pre-tested questionnaire was used to collect the required data. In addition to the socio-demographic characteristics of the respondents/parents, the questionnaire included the age and sex of the children aged below five years and the most prevalent harmful traditional health practices of the district. HTHPs such as, uvulectomy, tonsillectomy, milk teeth extraction, eyebrow incision, giving butter to a newborn baby, female genital mutilation and venesection were the malpractices included in the questionnaire. Moreover, as harmful traditional health practices expose human beings to HIV infections, a limited number of questions relating to the modes of HIV transmission and prevention methods were incorporated in the questionnaire.

The responding subjects were either the heads of the households or their spouses. As a rule, virtually all husbands are heads of the households in the present study area. Permission was obtained from the responsible government Officials of the district and oral consent was obtained from all participating individuals.

Data entry into the computer was carried out using the EPI INFO version 6 statistical package. After the completion of the data entry, the REC file of the EPI INFO was exported to SPSS version 11 and the appropriate statistical analyses (bivariate and multivariate logistic regressions) were performed. In this paper, P-values less than or equal to 5% are taken as statistically significant.

RESULTS

A total of 1214 persons (response rate, 99%) of which 41% were males responded to the questionnaire on the assessment of the most prevalent harmful traditional practices. The mean age of the respondents was 31.5 years (median, 30 years) with a standard deviation of 10.1 years. There were 1747 under-five children in the selected households and the percentage of males (51.6%) was slightly greater than the corresponding female children.

The mothers of the study children were more disadvantaged compared to their spouses with regard to education. Only 25.6% of the mothers were able to read and write while the corresponding figure for males (fathers) was double of the females. Nearly 92% of the families to which the study children belonged were Orthodox Christians, and subsistence farming was the main occupation for the majority of the population residing in the district. The socio-demographic characteristics of the children and their parents are given in Table 1.

Table 1: Socio-demographic characteristics of the children and their parents, Dembia District, northwest Ethiopia, April 2005

Background characteristics	Frequency	Percent (%)
Number of households (n = 1214)		
Urban	269	22.2
Rural	945	77.8
Age of child in months (n = 1747)		
0 – 23	433	24.8
24 – 47	638	36.5
48 – 59	676	38.7
Sex of child (n =1747)		
Male	901	51.6
Female	846	48.4
Place of residence (n=1747)		
Urban	334	19.1
Rural	1413	80.9
Educational status of the father (n=1036)		
Can't read and write	508	49.0
Can read and write (Through informal schooling)	313	30.2
Elementary school	127	12.3
High school	75	7.2
Above	13	1.3
Age of mother		
15 - 24	295	24.4
25 - 34	579	47.9
35 - 44	257	21.3
45 - 54	60	4.9
≥ 55	18	1.5
Educational status of the mother (n=1209)		
Can't read and write	899	74.4
Can read and write (Through informal schooling)	115	9.5
Elementary school	106	8.8
High school	84	6.9
Above	5	0.4
Number of <5 children in the household (n = 1214)		
1	722	59.5
2	451	37.1
3	41	3.4
Religion of the family (n = 1214)		
Muslim	101	8.3
Orthodox Christian	1113	91.7
Father's occupation (n = 1036)		
Subsistence farming	818	79.0
Trade/salesman	103	9.9
Government employees	34	3.3
Others	81	7.8

The top three harmful traditional health practices that the children had undergone were uvulectomy (89%) followed by giving butter to the newborn baby as the first feed (75.2%) and milk teeth extraction (58.2%). Venesection was the least practiced among the surveyed children. Female genital mutilation, which is usually noted to be the worst type of malpractice, is not a common phenomenon among the population of the district. This practice is very much limited in the minority communities of the district. The Muslims (13.2 %) residing in the towns and a small community (10.3%) who inhabited the periphery of the dis-

trict (Ghana Yohannis) were to some extent in favour of this form of traditional malpractice (Table 2). On the whole, about 91% of the households were observed to have had children below 5 years of age who underwent through at least one of the prevalent malpractices of the district.

The responding Muslims living in these small towns reported that they were accustomed to performing FGM due to religious reasons while the people residing in the rural locality of Ghana Yohannis claimed that the basis for the operation of FGM was mere culture they received from their ancestors. Only FGM operations of types I and II were observed among these two communities. On the other hand, the Orthodox Christian Amhara people of the district did not practice FGM. This group which constitutes over 90% of the population of the district ceased practicing FGM about three decades ago. During the present cross-sectional survey, it was learned from an old woman living in Kola Diba town (Center of Dembia district) that FGM was a common practice among the population of the district some three decades ago. The old woman reported that she was one of the many women who used to carry out such harmful practices as her main means of survival.

As can be seen from Table 2, there appeared a slight tendency for male children to be more exposed to the risk of undergoing the prevailing malpractices of the area than the corresponding female children. This was true for all malpractices except for the practice of giving butter to a newborn baby as the first feed which was relatively higher among the female children. However, these differences in the prevalence rates of harmful traditional health practices between male and female children fell short of statistical significance (the p-values derived from the chi-squared statistics were greater than 10% for each malpractice indicated in Table 2).

Table 2: Harmful traditional health practices (prevalence rates) among under-five children distributed by sex, Dembia District, northwest Ethiopia, April 2005

Type of HTHP	Under 5 Children who had undergone the malpractic					
	Males (n = 901)		Females (n = 846)		Both sexes (n = 1747)	
	number	%	number	%	number	%
Uvulectomy	806	89.5	748	88.4	1554	89.0
Giving fresh butter to newborn baby	666	73.9	647	76.5	1313	75.2
Milk teeth extraction	541	60.0	475	56.2	1016	58.2
Tonsillectomy	188	20.9	161	19.0	349	20.0
Eyebrow incision	155	20.8	136	19.2	291	16.7
Venesection	23	2.6	18	2.2	41	2.3
Female genital mutilation						
Among all female children			36	4.3		
Among Muslim female children (n = 121)			16	13.2		
Among female children of Ghana Yohannis (the remotest locality of the district neighbouring the Lay Armachiho woreda, n= 194)			20	10.3		

N.B. ● n shows the sample size in the respective population
● It can be easily demonstrated that (by employing a x^2-test) differences in the prevalence rates of harmful traditional health practices between male and female children were not statistical significant. The P-values for each of the above HTHPs were considerably greater than 10%.

It was learned from this study that all of the respondents irrespective of their living area (urban or rural) confirmed that they had heard of HIV/AIDS and 82.5% (that is, 1001 out of 1214) of them reported that having sex with multiple partners would transmit HIV. About 12% of the rural respondents reported that HIV/AIDS could be cured while the corresponding figure was only 1.1% among the urban respondents. As can be seen from Table 3, urban dwellers seemed to be more knowledgeable than the rural communities with regard to the appropriate routes of HIV transmission.

Table 3: Knowledge of the responding subjects on HIV/AIDS and its modes of transmission, Dembia District, northwest Ethiopia, April 2005

Perceptions of respondents	Urban (n=269)		Rural (n=945)	
	frequency	(%)	frequency	(%)
Modes of transmission*				
Sex with multiple partners	260	96.7	741	78.4
Use of (sharing) unsterile needles, blades, etc.	251	93.3	706	74.7
Blood transfusion	38	14.1	51	5.4
Mosquito bites	0	0.0	11	1.2
Living together with PLWHA in the same house	0	0.0	15	1.6
Sharing the same dish with PLWHA	3	1.1	35	3.7
Kissing	3	1.1	10	1.1
Don't know	3	1.1	127	13.4
HIV/AIDS can be cured				
Yes	3	1.1	111	11.8
No	252	93.7	638	67.5
Don't know	14	5.2	196	20.7

* indicates multiple answers

There was also an interest to investigate the impact of selected socio-demographic characteristics on the practice of such harmful traditions among under-5 children of the district. Accordingly, both bivariate and multivariate analyses were performed. The demographic and socio-economic characteristics (independent variables) considered were: place of residence, educational status of the father, educational status of the mother, occupation of the father, occupation of the mother, age of mother, number of under-5 children in the household, age of child (in months), religion and family size. The outcome (dependent) variable referred to the status of a child in a given household whether s/he had undergone at least one of the HTHPs indicated in Table 2. In this regard, several different bivariate analyses were done to see the association of each independent variable with the outcome variable. Accordingly, place of residence, educational status of the father, educational status of the mother, occupation of the father, family size and religion were found to be highly significantly associated with the practice of HTHPs among the under-5 children (the P-values were very much less than 0.05 for each of the above five factors). Occupation of the mother and age of the child showed some association at the 0.2 level of significance with the outcome variable. On the other hand, the remaining two variables (number of under-5 children and age of mother) did not show a statistically significant association with the presence/absence of the most prevalent HTHPs of the district. The corresponding P-values for each of these variables were higher than 40% (Table 4).

Table 4: Results of separately regressing HTHPs (practiced or not practiced) on each socio-demographic variable, Dembia district, northwest Ethiopia, 2005 (Bivariate analyses)

Explanatory variable	HTHP among under 5 children		OR (Crude)	95% C.I.	P-value
	Yes	No			
Family size					**(0.014)**
2 - 4	474	36	1.00		
5 - 7	460	63	0.555	0.361, 0.852	0.007
8 - 11	158	23	0.522	0.300, 0.907	.021
Age of child (in months)					**(0.151)**
< 12	200	26	1.00		
12 - 23	159	27	0.766	0.430, 1.364	0.364
24 - 35	258	26	1.290	0.727, 2.290	0.385
36 - 47	202	20	1.313	0.710, 2.428	0.385
48 - 59	273	23	1.543	0.855, 2.783	0.150
Age of mother (in yrs)					**(0.429)**
15 - 24	272	23	1.00		
25 - 34	516	63	0.693	0.420, 1.141	0.150
35 - 44	229	28	0.692	0.388, 1.234	0.212
≥ 45	72	6	1.015	0.398, 2.585	0.976
Number of under 5 children in the hh					**(0.613)**
1	651	71	1.00		
2	406	45	0.984	0.664, 1.458	0.936
3	35	6	0.636	0.259, 1.565	0.325
Educational status of the mother					**(< 0.001)**
Can't read/write	842	57	1.00		
Can read/write (informal schooling)	95	20	0.322	0.185, 0.559	< 0.001
Primary	87	19	0.310	0.176, 0.545	< 0.001
Secondary	62	22	0.191	0.110, 0.333	< 0.001
Above	3	2	0.102	0.017, 0.620	0.013
Educational status of the father					**(< 0.001)**
Can't read/write	480	28	1.00		
Can read/write (informal schooling)	280	33	0.495	0.293, 0.837	0.009
Primary	99	28	0.206	0.117, 0.364	< 0.001
Secondary	58	17	0.199	0.103, 0.386	< 0.001
Above	8	5	0.093	0.029, 0.304	< 0. 001
Occupation of the father					**(< 0.001)**
Subsistence farming	758	60	1.00		
Trade (sales-service)	77	21	0.290	0.168, 0.503	< 0.001
Government employee	28	6	0.369	0.147, 0.927	0.034
Other	62	24	0.205	0.119, 0.351	< 0.001
Occupation of the mother					**(0.086)**
Subsistence farming	32	3	1.00		
Trade (sales-service)	40	8	0.469	0.115, 1.912	0.291
Housewife	947	98	0.906	0.272, 3.013	0.872
Government employee	9	4	0.211	0.040, 1.120	0.068
Other	61	7	0.817	0.198, 3.375	0.780
Place of residence					
Urban	212	58	1.00		
Rural	880	64	3.761	2.557, 5.531	< 0.001
Religion					
Muslims	73	28	1.00		
Orthodox Christians	1019	94	4.158	2.562, 6.748	< 0.001

N.B. 1) In households (abbreviated as hh) with two or more under 5 children, the youngest child was taken for the logistic regression analysis.

2) The P-values regarding the overall significance of variables with more than two categories are given in parentheses.

Finally, those predictor variables which were significantly associated with the outcome variable at a 0.2 level of significance (bivariate analyses) were entered into the multivariate logistic regression model. Accordingly, among the eight explanatory variables included in the multivariate logistic model, only educational status of the mother, place of residence and religion remained to be significantly and independently associated with the binary outcome variable (Table 5). Occupation of the parents, family size, age of child and educational status of the father which showed some significant associations (at an α-value of 10%) with the practice of HTHPs in the bivariate analyses fell short of statistical significance in the latter analysis. The backward stepwise regression method employed in the multivariate analysis ended up with only predictor variables that were statistically significant at the 0.05 level of significance (Table 5). This study indicated the very fact that as the level of educational status of the mother increased, there appeared a corresponding decrease in the practice of HTHPs among the under-5 children. Moreover, under-five children living in rural areas were about 1.8 times more likely to be exposed to the risk of HTHPs compared to those residing in towns (AOR = 1.8; 95% CI: 1.02, 3.16). The Orthodox Christians were also observed to be about twice (AOR = 1.9; 95% CI: 1.03, 3.35) more likely to undergo the traditional malpractices than the Muslims of the district (Table 5).

Table 5: Results from the multivariate analysis – adjusted for demographic and socio-economic variables, Dembia district, northwest Ethiopia, 2005

Explanatory variable	HTHP among under 5 children		OR (adjusted)	95% C.I.	P-value
	Yes	No			
Educational status of the mother					**(0.003)**
Can't read/write	842	57	1.00		
Can read/write (informal schooling)	95	20	0.445	0.245, 0.807	0.008
Primary	87	19	0.551	0.283, 1.072	0.079
Secondary	62	22	0.362	0.182, 0.720	0.004
Above	3	2	0.105	0.017, 0.648	0.015
Place of residence					
Urban	212	58	1.00		
Rural	880	64	1.797	1.021, 3.162	0.042
Religion					
Muslims	73	28	1.00		
Orthodox Christians	1019	94	1.857	1.029, 3.352	0.040

N.B. 1) In households with two or more under 5 children, the youngest child was taken for the logistic regression analysis.
2) The P-values regarding the overall significance of variables with more than two categories are given in parentheses.
3) The above parsimonious (condensed) model adequately fits the data as P = 0.66 (according to the results from the Hosmer and Lemeshow test)

DISCUSSION

This particular study has shown the very fact that over 40% of the households included in the study had at least two under 5 children to take care of (Table 1). These findings are in complete agreement with the results of other similar studies conducted elsewhere in Ethiopia (14, 15). The high proportion of persons who cannot read and write, particularly among women, clearly shows the burden of illiteracy and has important implications in the socio-economic and political status of the people (14 -16).

Uvulectomy, which was once (about two decades ago) used to be practiced by all persons residing in the present study areas (10), is not currently accepted by about a tenth of the population of the district. It could be said that only a small fraction of reduction was seen in the prevalence rate of uvulectomy in the last several years. The other two very prevalent malpractices identified were giving fresh butter to a newborn baby and milk teeth extraction. The former one is a unique practice among the Amhara people of northwest Ethiopia while the latter is practiced in most regions of the country (6-9, 14). The study also showed that a fifth of the under 5 children had undergone the practice of tonsillectomy while the operation of eyebrow incision occurred in one out of six under-5 children of the district of Dembia. These malpractices are also widely practiced in Ethiopia (6, 7, 14).

Female genital mutilation, which is usually noted to be the most barbaric practice, was not reported by the Orthodox Christian Amhara people of the district. This group which includes the majority of the population of the district ceased practicing FGM about three decades ago. However, it was unclear why and how this harmful practice was rejected by most of the dwellers of the district. It is therefore important to carry out further explorations in the same area and find out the reasons that made the people reject such malpractices. The lessons that may be learned from such explorations could help other areas such as, South Gondar to apply the same procedure. FGM is currently practiced in most rural areas of South Gondar among the Orthodox Christian Amhara people (15).

On the other hand, FGM is currently practiced among the minority communities of the Muslims and a small community of Ghana Yohannis. Nearly all the Muslims of the district live in the towns, and Ghana Yohannis is one of the localities of the district located in the periphery. The study subjects taken from the Muslim community reported that it was for religious purposes that FGM was practiced by them. For the people of Ghana Yohannis , it was culture which was singled out as the mere driving force for practicing FGM. It is highly probable that FGM is practiced in the neighbouring Woreda (Lay Armachiho) to which Ghana Yohannis is very close and shares most of the culture. On the other hand, reports indicate that in Islamic ruling, FGM is neither an obligation nor a Sunna, with no evidence supporting either (17).

The prevalence rate of FGM in the district of Dembia is relatively much smaller compared to many areas of the country (8, 18). This could probably be due to the influence of the great majority of the Orthodox Christian Amhara people of the district who had stopped the practice several years ago. In Ethiopia, the prevalence rate of FGM at the national level was estimated at 73% (18). Like most HTHPs, FGM is performed by non-professional women in the district of Dembia. This is contrary to the practice in some other places in Ethiopia. For example, a study undertaken in the southern part of the country *(Kembata Tembaro zone)*, an FGM prevalence rate of 98% was reported, and surprisingly enough 11% of the operations were performed by health professionals (8).

In order to prevent women and the girl child from the suffering they face as a result of FGM, this malpractice which denies their human rights should be banned. In this regard, the Dakar Declaration of November 1997, which insists on the eradication of FGM and other traditional disfiguring operations has to be strictly followed (19). It is also of great value to learn from the experience of Cote d'Ivore (20) and the Positive Deviance Approach of Egypt (21). In Cote d'Ivore, FGM and other harmful practices are punishable by jail terms of one to five years. The Positive Deviance Approach project in Egypt searches for solutions to FGM within the community. It first identifies positive deviants (community members who stray from cultural norms-sometimes secretly) and creates them a forum to discuss with the community leaders, local NGOs and the like.

Ethiopia, a country in which nearly three-fourths of the females undergo some form of FGM, has no explicit law prohibiting this malpractice (22). The government recognizes that FGM is a crime but shies away from banning it.

Unlike the findings of other studies, all the responding subjects of the present study, who were randomly selected from both urban and rural areas, reported that they had heard of HIV/AIDS (23, 24). However, the investigation done on their knowledge of the modes of transmission and preventive measures indicated the fact that most of the interviewed individuals were lacking the correct knowledge. In particular, subjects taken from the rural areas were unable to mention the most important modes of transmission of HIV/AIDS and its preventive measures.

In Ethiopia, although the impact of HTHPs which apply mostly bleeding techniques using unsterilized tools is not studied, it is highly probable that HIV

transmission is partly enhanced as a result of such harmful traditional operations (7). In order to avert the present undesirable situation, concerted efforts which may be driven by strong political leadership and public commitment should further be strengthened (25).

An assessment of the impact of selected socio-demographic variables revealed that mother's education, place of residence, and religion were independently and significantly associated with the most prevalent HTHPs of the district. Both the bivariate and multivariate (logistic regression) analyses showed that as the level of education attained by the mother increased, there appeared a decline in performing HTHPs among the under-5 children. Education is instrumental not only in creating educated and productive people, but also has a number of other advantages, including liberating people from the burden of HTHPs.

The under 5 children living in towns were less likely to be exposed to the risk of HTHPs. This could probably be due to the influence of the living conditions taking place in urban centers that eroded most of the harmful traditions which were prevalent in the surrounding rural areas. The nature of the settlement pattern in the rural areas of Ethiopia in general, and in the present study area in particular, could have contributed to the present burden of HTHPs. The villages of the rural areas which are scattered here and there are usually noted to be the causes of many problems including HTHPs (15). This is due to the inaccessibility of most rural areas to the modern way of life which includes schooling, clinics, clean water, etc.

Although the Muslims of our study area are in favour of the most serious forms of HTHPs, like female genital mutilation, they are generally far from practicing the majority of the malpractices prevailing in the district compared to the Orthodox Christians. Education of the father which showed a significant association in the bivariate analysis fell short of statistical significance in the multivariate analysis. It was actually the level of education attained by the mother that had a direct bearing on the practice of HTHPs regardless of the type of occupation that the parents are engaged. It is to be noted that mothers spend much time with their under 5 children compared to the fathers. Accordingly, the contribution of learned mothers to the lives of their children is of high importance. It is therefore highly likely that the present significant association of women's educational status and the practice of HTHPs was brought by such mother-child relationship unlike the men.

In conclusion, the high prevalence rates of HTHPs coupled with the use of tools which could most probably be unsterilized calls for an appropriate measure. In particular, given the present situation in which HIV/AIDS is a serious health problem of the country, the issue of HTHP has to be addressed properly. This study has reminded us of the fact that there are still many people who lack the appropriate knowledge regarding the modes of transmission of HIV/AIDS.

Although special attention was paid during the data collection, the possibility of under-reporting while enumerating the under-5 children who underwent HTHPs cannot be ruled out.

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Incorporating the adverse effects of HTHPs into the existing primary schooling curricula, a continuous and sustainable health education addressing HTHPs, and the banning of the most harmful traditional health practices, such as FGM are recommended. Moreover, an integrated health activity which includes the issue of harmful traditional health practices and its associated risks should be given due attention at the grass roots level. The on-going efforts of the country focussing on female education should be strengthened and a mechanism which will empower women should also be sought. Furthermore, as religion was found to be one of the contributing factors relating to the practice of HTHPs, it would be necessary to involve religious leaders in the struggle against the prevailing malpractices (HTHPs) of the district of Dembia.

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