

### **OMICS International**

# Assessment on Knowledge, Attitude and Practice with Regard to the Transmission and Prevention of HIV/AIDS among Barbers and Beauty Salon Workers in Hossana Town, South Ethiopia, 2017

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#### Abstract

**Background:** HIV/AIDS still remains a major public health problem all over the world. Skin is one of the innate, barriers for pathogens to enter and used as protective organ .its integrity is responsible in prevention of infection like HIV/AIDS. Barbers and beauty salons are cosmetic workers that undertake skin-piercing practices involving reusable sharp instruments, which present risks for transmission of HIV and other blood-borne pathogens. Barbers procedures can in advertently damage the skin through abrasion or minor accidental cuts. Simple nick caused by clipper or razor blade is enough for infection to occur. HIV transmission through sharing of non-sterile sharp instruments used for barbering, circumcision, facial scarification, incision, tattooing, ear perforation, bloodletting, injections and acupuncture have always been given less attention in the spread of HIV. Since it is necessary to assess on knowledge, attitude and practice with regard to the transmission and prevention of HIV/AIDS among barbers and beauty salon workers.

**Objectives:** This study attempts to assess barbers and beauty salons knowledge, attitude and practice regards to the transmission and prevention of HIV/AIDS in Hossana town.

Methods: Across-sectional study was conducted to assess on knowledge attitude and practice with regard to the transmission and prevention of HIV/AIDS among barbers and beauty salons in their working place (barber shops) in Hossana town from January2-30, 2017. A semi-structured questionnaire and check list was used for data collection. The total budget used to conduct over all study was12846.5 Ethiopian birr.

**Result:** From a total of 81 Barbers and Beauty salons participated in the study 50.6% were male. 54.3% were protestant and 29.6% orthodox. Regarding marital status 62.9% were single and 24.7% married with age distribution of 20-24 (45.6%), 25-29 (31%) and Educational status 74.1% secondary school and above. The major ethnic groups were Hadiya (51.8%) followed by Amhara 17.3%. Those that had taken training 31% confronted bleeding accidents due to cut or piercing during barbering 70.3%, clients coming with skin lesions on head in the previous two weeks 61.7%, barbers and beauty salons skin lesion on their hand in the previous two weeks 65.4%. Most of them use scissors 77.7% electrical shaver 49.4% and razor blades 39.5%. All of them herd about HIV/AIDS; 50.6% from media and 18.5% from Health professionals. On mode of Transmission they reported that 90% by unsterile injection, 85.5% by sex, 56.8% by kissing and 40.7% by Insect bite. Only 34.5% know that their professions expose them to HIV. Those using the same brush 81.4%, glove usage 9.8%, using soap for disinfection 53.1% using hand held flame for sterilization 23.4%. Frequency of disinfection were every session 28.4% and weekly 35.8%. Those dispose wastes and sharp objects to open field were 53%. Religious, income, age and using Mass media like T.V, radio were significant predictors associated with equipment's Sterilization for each client served.

**Conclusion:** This study has revealed that good knowledge and positive attitude towards Transmit ion and prevention of HIV/AIDS among Barbers and Beauty salons. But the barbering procedures in the study have the risk for HIV transmit ion through use of non-potent disinfection methods and improper handling of sharp instruments. Poor usage of glove, use of the same brush for each client and blade to scalp contacts in most of the sessions observed. Religious, income, age and using Mass media like T.V., radio were significant predictors associated with equipment's Sterilization for each client served. Therefore barbers and beauty salons could serve as core group for indirect transition of HIV/AIDS. This should be of great concern to effectively control HIV/AIDS. Health Education strategies such as training, supportive supervision and peer education are needed to facilitate the adoption of effective precaution Measures against HIV infection among Barbers and Beauty salon workers.

**Keywords:** HIV/AIDS; Transmission; Barbers and Beauty Salons; Hossana Town; Ethiopia

## Introduction

Human Immune Virus (HIV/AIDS) still remains a major public health problem all over the world, It has caused in calculable human suffering, social and cultural disruption and huge economical loss [1]. HIV/AIDs is causing nearly 16,000 new infection every day resulting a global estimate of people living with the virus to be 42 million out of this, 29.4 million adults and children are living with HIV /AIDS in sub-Saharan region at Africa [2].

At the end of 2007 peoples living with HIV/AIDS 33 million from

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this adults living with AIDS 30.8 million women living with Acquired Immune Deficiency Virus (AIDS) 15.5 million and children 2 million are staying with HIV virus. People newly infected with HIV 2.7 million from this newly infected 0.37 million are children. The year 2007 also shows 2 million deaths despite recent improvements in access to anti-retroviral treatment. Since 1981, more than 25 million people have died of AIDS Africa has 11.6 million AIDS orphans [3].

In developing and transitional countries 9.7 million people are in immediate need of life saving AIDS drugs; of these only 2.99 million (31%) are receiving the drugs. The end of year 2007, women accounted for 50% of all adults living with HIV worldwide, and for 59% in sub-Saharan Africa. Adults and children living with HIV 22 million and 1.9 million newly infected, adult prevalence 5% deaths of children and adults 1.5 million in sub-Saharan Africa [4].

HIV probably started to spread in Ethiopia in the early 1980s and the 1st evidence of HIV infection was found in 1984; since then the prevalence has been increasing, by 1993 adult HIV prevalence had increased to 3.2% and by 1996 it increased to 5.2% and by 1997 it was estimated to be 7.4% of prevalence. AIDS will increase the rate at all ages; however, the impact will be most severe among in young adults and children under the age of five. This rapid increase in young adult deaths would have serious consequences for economic and social development [5].

Client with Human Immune Virus (HIV) are more likely to develop any of 17 of the 20 most common infections or in inflammatory conditions. Skin is one of the innate, barriers for pathogens to enter and used as protective organ in body .its integrity is responsible in prevention of the accidental infection like HIV/AIDS [6].

Transmission of HIV from one to another in a number of ways blood transfusion or blood and blood products contact, unsterile sharp instruments utilization's un sterile injections, prenatal transmission and heterosexual intercourse. According to World Health Organization (WHO) the African region belong to the epidemiological pattern II of HIV transmission i.e. heterosexual transmission blood products contact, and utilization of unsterile instruments [7,8].

Prevention is the only viable way to control HIV spread, as there is no care for the infection presently. In our country, efforts have focused mainly on prevention of HIV through sex, blood transfusion and mother to child transmission. This must have been informed by the fact that more than 90% of HIV/AIDS transmissions occur through the combination of these routes [9]. However, HIV transmission through sharing of non-sterile sharp instruments such as those used for barbering, circumcision, facial scarification, incision, tattooing, ear perforation, bloodletting, injections and acupuncture have always been vaguely classified as 'others' and given less attention in the campaign against the spread of HIV.

Barbers and beauty salon are cosmetic workers that undertake skinpiercing practices involving re-useable sharp instrument, which present risks for transmission of HIV and other blood-borne pathogens from one client to the other. Though barbers don't carry out procedures correctly so that deliberately penetrate the skin, the procedures can in advertently damage the skin through abrasion or minor accidental cuts [10].

Simple nick caused by clipper or razor blade is enough for infection to occur [11]. Due to the lipid envelope that protects HIV from dehydration, the virus can survive on the surfaces of barbering instruments for a period long enough for transmission to occur, particularly in commercial barber shops [12].

Proper, effective and consistent decontamination of barbering and beauty salon instruments is important in preventing HIV transmission in barber shops. Surgically, barbering instruments are semi-critical instruments that come in to contact with damaged non intact skin and require at least intermediate level disinfection to make them safe [13]. Methods and agents that have been designed to inactivate other viruses such as hepatitis B are also effective for HIV. These agents include alcohol (ethanol, isopropyl), chlorine (sodium hypochlorite), phenol compounds, quaternary ammonium compounds, iodine (sodium hypochlorite), phenol compounds, quaternary ammonium compounds, iodine and iodized-phosphates. HIV/AIDS on barbering instruments can also be inactivated by using sterilizing agents such as flame, dry heat, cream and ultra-violet light [14].

There is only one study done in this area in our country Jimma town concerning the KAP of barbers in handling the risk related factors. But no study has done in south Ethiopia. The same is true for Hossana Town. When dealing with all clients, barbering instruments must always be disinfected or sterilized to minimize the risk of HIV transmission. The concept of universal precaution considers all blood and body fluids to be potentially infectious and all invasive instruments to be potentially contaminated if already used [15]. The responsibility to keep instruments free of infective agents lies on the barbers. This study, therefore, was aimed at assessing on knowledge attitude and practice towards prevention and control of HIV among barbers and beauty salons.

Little is known about barbers and beauty salons practices relating to the prevention of HIV/AIDS. The misunderstanding about mode of transmission among barbers and beauty salon may be solved through Information Education and communication (IEC). Decisions concerning the strategies or methods to be used as prevention and control for HIV/AIDS among barbers and beauty salon can be facilitated. It fills the gap of knowledge in different situations at high risk behaviours for HIV/AIDS transmission. It can bring positive changes in the behaviours of barbers and beauty salons workers in Hossana Town. It is also helpful to give recommendations and suggestions to concerned bodies based on the result obtained.

The main objective is To Assess on knowledge, attitude and practice with regard to the transmit ion and prevention of HIV/AIDS among barbers and beauty salon workers; in Hossana Town, South Ethiopia, 2017.

And the specific objectives are; to determine the level of knowledge of barbers and beauty salons to HIV/AIDS in Hossana Town. To describe the risk behaviours of barbers and beauty salon workers with respect to HIV/AIDS in Hossana Town. To describe the hygienic conditions of beauty salons and barbers shops in Hossana Town. To determine practice of barbers and beauty salon workers towards HIV prevention in Hossana Town. To collect data about the method of disinfecting the instruments and procedures used among barbers and beauty salon workers in Hosanna Town. In conclusion a finding of this data is important for HIV transmission reduction.

# **Materials and Methods**

A cross-sectional survey was used to Assess knowledge Attitude, and practice of barbers and beauty salon workers with regard to the transmission and prevention of HIV/AIDS in 2017. Hosanna town is 230 km south of Addis Ababa with an area of 140 km2 and a total population of 103499. It has 3 sub cities-towns and 15 kebeles. The health service coverage of Hosanna town is 33.3%. There are 1 hospital

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1 health center and more than 15 private health institutions and drug venders providing health services including PMTCT and VCT.

Source The source of population is all barbers and beauty salons in Hosanna town who have been giving the services in their shops.

Study population all barbers and beauty salon's which are giving the services and functional at their barber shops and beauty Salon shops respectively.

#### Sample size determination

For barbers: Due to time and resource constraints to conduct census on the whole source population, a sample survey from the total 110 barbers in the town with sample size of 48 was statistically determined using the formula;

$$n = \frac{NZ^2 pq}{d^2 (N-1) + Z^2 pq}$$

(n = sample size to be determined)

$$n = \frac{110(1.96)^2 (0.5)(0.5)}{(0.05)^2 (110-1) + (1.96)^2 (0.5)^2}$$

(N=Total barbers (source population)=110)

(0.05)2(110-1) (1.96)2(0.5)2

n=85.6874

z=the standard normal deviate corresponding to the confidence level of 95% i.e. 1.96

p=proportion from the specific confidence assumed to be studied.

q=1-p=1-0.5=0.5

d=Reliability coefficient 5% or degree of accuracy desired for n<10,000

$$\label{eq:nf} \begin{split} &nf = n/(1+n/N) = 85.6874/(1+85.674/110) = 85.6874/1+0.779 = 85.6\\ &874/1.779 = 48.17 \end{split}$$

 $nf\approx 48$ 

## Sampling methods for Barbers

Urban health extensions have total number of Barbers with list on their registration book at their office.

Therefore the Selected barber will be 48. After sample size (48) as above a systematic desired sampling method is employed to draw sample from the target population.

The sampling interval determined by: k=N/nf=110/48=2.29=2 thus a sample interval will be every 2 barber shop. The first barber shop is selected using lottery method.

**For beauty salons:** The same procedure was used to get sample size of beauty salon and sampling technique also similar. A sample survey from the total 72 beauty salons in the town with sample size of 33 was statistically determined using the formula;

$$n = \frac{NZ^2 pq}{d^2 (N-1) + Z^2 pq} = \frac{72(1.96)^2 (0.5)(0.5)}{(0.05)^2 (72-1) + (1.96)^2 (0.5)(0.5)} = 60.769 \approx 61$$

Where n=Sample size to be determined n=61

N=Total beauty salons (Source population)=72

z=the standard normal deviation Corresponding to the confidence level of 95% i.e. 1.96

p=proportion from the specific confidence assumed to be studied.

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q=1-p=1-0.5=0.5

d=Reliability coefficient 5% or degree of accuracy desired

For n<10,000

nf=n/(1+n/N)=61/(1+61/72)=61/1+0.872=61/1.8472=33.02

nf=33.02

 $nf \approx 33$ 

nf=exact sample size

nf=33 therefore the selected Beauty salons were 33 in number.

## Sampling methods for Beauty salons

Similarly urban health extensions have total number of Beauty salons with list on their registration book at their office.

After sample size (33) as above a systematic sampling method is employed to draw sample from the target population. The sampling interval is determined by;  $k=N/nf=72/33=2.1818 \approx 2$ , so a sample internal was 2, that means every 2nd beauty salon was taken. But the first beauty salon was selected using lottery method among beauty salons numbered.

All in all a total sample size of 81 was used (48 barbers+33 Beauty salons=81) for conducting over all data collection.

#### Study Instrument used

During study period Questionnaires, computer, Compact Desk (C.D.) for storing paragraphs, Camera, pencil, and eraser were used additionally. All of Data collectors were above grade 10 in educational status. Training was given for 3 days before data collection. When the interviewer collected data they were asked the respondents in local language which is Amharic.

A structured and unstructured questionnaire for exit interview is used. Structured check lists for direct Observation of client provider interaction adapted from different literatures was used during data collection. Quantitative data was obtained by using a pre tested questionnaire for knowledge attitude and practice assessment and check list for observing the practices at barbers and beauty salon shops. The collected data were first checked by the principal investigator for its completeness. To explain the study population relation to study variables, frequency tables, internal comparison and summary statistics were done by using scientific calculator. The result was described on the basis of the general and specific objectives. Results are presented by using tables.

## Result

## Socio-demographic characteristics

When we see socio- demographic characteristics the distribution of sex is almost equal which is un expected result. Concerning religious most of them were protestant more than half followed by orthodox. Muslim and catholic occupy least of all religious. related to marital status single contains larger part (62.9%).when we come to age distribution, as their age increase the number of barbers and beauty salons workers decrease. most of them are well educated, only little of them completed primary school the rest above this as study showed. again when we see ethnic distribution Hadya is largest part of all ethnic group followed by Amhara and Oromo. The study revealed that as

S.No.

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%

Frequency

average monthly income increase the number of barbers and beauty salon worker decrease (Table 1).

Barbers and Beauty salons that had taken training for their job were 25(31.0%). on the working processes 57(70.3%) of them confronted bleeding accidents due to cut or piercing or any damage from the instruments they were using, either to the barber or client or both simultaneously in the previous two months. and 50(61.7%) of them have given a service for clients coming with some form of skin lesions on their head (face, neck) in the previous two weeks; 53(65.4%)of the barbers beauty salons were remember that they have had a skin lesions on their hands in the previous two months. Sharp instruments have been used includes razor blades 32(39.5%), scalpel 22(27.1%)electrical shaver or clippers 40(49.4%) and scissors 63(77.7%). Barbers and Beautify salons provide customers (clients) 1-5 clients/ day 26(32%), 6-10 clients/day21 (25.9\%), greater than 10 clients/day 34 (42%) (Table 2).

All of them heard about HIV/AIDS, mostly from mass media and little of them have information from health professionals. Misunderstanding on mode of transmit ion observed as this result

Study variables	Frequency	Percent
Sex		
Male, Female	41, 40	50.61, 49.38
Age		
15-19, 20-24	7, 37	8.64, 45.67
25-29, 30-34	25, 5	31, 6.17
35-39, 40-44	4, 1	4.94, 1.23
45-49, >50+	1, 1	1.23, 1.23
Religion		
Protestant, Muslim	44, 8	54.32, 9.88
Orthodox, Catholic	24, 4	29.63, 4.94
Others, Total	1, 81	1.23, 100
Marital Status		
Married, single	20, 51	24.69, 62.96
divorced, widowed	6, 4	7.41, 4.91
Total	81	100
Educational Status		
Illiterates	3	3.7
Read and write	4	4.94
Primary School(1-8)	14	17.28
Secondary School and above	60	74.1
Total	81	100
Ethnic Group		
Hadya, Kembata	42, 3	51.85, 3.7
Silte, gurage	2, 4	2.47, 4.94
Amhara, Oromo	14, 9	17.28, 11.11
Tigire, others	3, 4	3.7, 4.94
Total	81	100
Monthly Income in BIRR		
<500	33	40.7
501-1000	10	12.34
1001-2000	8	9.87
2001-3000	17	20.9
>3001	13	16
Total	81	100

 Table 1: Distribution of socio-demographic characteristics of barbers and beauty salons in Hosanna Town, South Ethiopia, 2017.

	A particular training they tak	e for their job	
	Yes	25	31
1	No	56	69
	Total	81	100
	Any forms of accident s due to Cut, pi instruments using in the prev		from
2	Yes	57	70.37
	No	24	29.63
	Total	81	100
	Clients coming with skin lesions on the heat	ad in the previous	2 weeks.
0	Yes	50	61.73
3	No	31	38.3
	Total	81	100
	Any sorts of skin legions on your hands	in the previous 2	weeks
	Yes	53	65.43
4	No	28	34.56
	Total	81	100

Variables

S.No.	Variables	Frequency	%		
1	HIV/AIDS can be transmitted by	frequency	%		
	Blood contact				
	Yes	71	87.7		
	No	10	12.34		
	TOTAL	81	100		
2	Have you heard about HIV/ AIDS	frequency	%		
	Yes	81	100		
	No	0	0		
	Total	81	100		
	What are the sources of your Information?				
3	Mass media (T.V., radio Newspaper posters)	41	50.62		
	-Health professionals	15	18.52		
	Clients	11	13.58		
	-friends	14	17.28		
	-other (specify)	9	11.11		
	Total	81	100		
4	Do you have information about PMTCT?				
	Yes	21	25.92		
	No	60	74.07		
	TOTAL	81	100		

 
 Table 3: Disribution of study variables with regard to their knowledge of transmit ion and prevention of HIV/AIDS among barbers and beauty salons, in Hossana town, South Ethiopia 2017.

showed. They said that HIV can be transmitted by insect bite and living together. This shows they need additional knowledge from health professional or training is necessary for them (Table 3).

68% of them are voluntary to discuss with clients on their services poor hygienic practices. Half of them didn't know that their profession exposes them to HIV as result shows.

If they don't want to be pregnant the method they were using for avoiding pregnancy was modern Family planning (pills, inject able) 30(37%), safe sex practice 21(25.9%), abstinence of sex 13(16.0%) and there are others such as condom, IUD Loop 17(21.0%). More than half

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of them are not interested to be pregnant if they are positive for HIV test result 47(58.0%) and most of them use the same brush 66(81.4%) (Table 4).

The result of this study showed during practice most of them use the same brush for each client on the other hand use of gloves during giving service is very small (9.8%).additionally half of them use soap for disinfection .those exactly using hand held flame for sterilization were only 23.4% and frequency of disinfection were every session for each client 28.4%.again53% of them dispose wastes and sharp objects to open field. from this result we can understand clearly that risk behaviour of barbers beauty salon workers is undergoing. this is the main point of this research expectation (Table 5).

Analysis was not done by SPSS software, but using scientific

S.No.	Variables	Frequency	%	
	Due to my occupation I am not worried about HIV/AIDS transmit ion.	frequency	%	
1	Agree	28	34.56	
	No idea	43	53	
	Disagree	10	12.34	
	Total	81	100	
	Which method they use for prevention of HIV/ AIDS transmit ion?	frequency	%	
	Abstinence	13	16.05	
•	Condom	15	18.52	
2	One to one correspondence	42	51.85	
	Pray	11	13.58	
	Nothing	0	0	
	TOTAL	81	100	
	Clients should discuss with barber on their feeli hygienic practices	ngs to the servio	ces poor	
3	-agree	55	68	
	-No Idea	19	23.46	
	-disagree	7	8.64	
	Total	81	100	
	Is brush they use the same for ea	ach client		
4	Yes	66	81.48	
4	No	15	18.52	
	Total	81	100	
	If you don't want to be pregnant, what methor pregnancy?	ds you prefer to	avoid	
	Modern family planning	30	37	
5	Avoid sex	13	16	
	Safe sex practice	21	25.9	
	Others(specify IUD loop)	17	21	
	TOTAL	81	100	
	If you are positive for HIV/AIDS test result, happened pregnant?	ave you interest	to be	
6	Yes	34	42	
	No	47	58	
	Total	81	100	
	Where do you dispose refuse?			
	Municipality car for waste pick	17	21	
7	Open field	43	53	
'	Burned	13	16.04	
	Buried	8	9.88	
	Total	81	100	

 Table 4: Distribution of study variables in relation to their attitude (psychosocial) in

 Hossana Town, South, Ethiopia, 2017.

S.No.	Variables	Frequency	%		
	Hygienic principles (rules) in their working places	Frequency(No)	%		
	Sharp instruments they use for the service.				
1	-razor blades	32	39.5		
	-scalpel	22	27.16		
	-electrical shaver or clippers	40	49.4		
	-scissors	63	77.78		
	-other (specify)	0	0		
	Total				
	Do you sterilize or disinfect your ins clien		for each		
2	Yes	23	28.4		
	No	58	71.6		
	Total	81	100		
	Methods they use	for disinfection			
	-Methyl lated spirit	1	1.23		
	-kerosene	3	3.7		
	-alcohol %	30	37		
3	-0.5% chlorine solution for 10 minutes	0	0		
	-combined	4	4.9		
	-other (specify soap, omo )	43	53.1		
	Total	81	100		
	Methods they use	for sterilization			
	-ultraviolet light	1	1.23		
4	-Boiling for 20 mines starting when the water starts to roll.	11	13.58		
	-hand held flame	19	23.47		
	-other (specify)	0	0		
	Total				
	When do you sterilize or di	sinfect the equipments?	,		
	-some times (weekly)	29	35.8		
	-every session for each client	23	28.4		
5	always (once in a day)	18	22.22		
Ū	-other (specify every 15 day and monthly )	11	13.6		
	Total	81	100		
	Variables	Frequency	%		
	Do you use	e gloves			
6	Yes	8	9.88		
0	No	73	90.12		
	Total	81	100		
	When do you use gloves				
	-some times for each parts of the services	2	2.47		
7	-always during serving client	3	3.7		
	-only during washing equipments	3	3.7		
	-other (specify)	0	0		
	Total	8	100		

 
 Table 5: Distribution of study variables in relation to their practice of barbers and beauty salons service to prevent HIV/AIDS in HossanaTown, South Ethiopia, 2017.

calculator tried for summarizing. Summary of analysis result in table above showed that there is association between dependent variable equipment's Sterilized every session for each client and independent variables religious, income, age and use of Mass media (T.V., radio Newspaper posters). But for the rest educational status and sex there is no association observed (Table 6).

Variable	Equipment's Sterilized every session for each client		X <sup>2</sup>	P-value
	Yes	No		
Religious				
Christian	17	56	69.235	0.001
Muslim	6	2		
	Sex			
Male	11	30	0.0995	0.45
Female	12	28		
	Income			0.025
≤ 2000	10	41	4.799	
≥ 2000	13	17		
	Educational statu	S		
Illiterate	1	2	0.922	0.4
Educated	22	56		
	Age			
15-34	18	56	6.979	0.01
>35	5	2		
Using mass m	edia (radio, TV, new	/spaper, posters)		
Yes	12	29	25.908	0.001
No	11	29		

Table 6: Summary of chi square analysis result for dependent variable and independent variables.

# Discussion

In this cross-sectional study attempts have been made to assess the knowledge, attitude and practice of barbers and beauty salons towards transmit ion and prevention of HIV/AIDS, a total of 81barbers and beauty salons participated. Although there might be a variation in the result, some comparisons are made with other researches done in different countries.

Accordingly, the finding of the study showed that half of them 50.6% were male and both sex are observed when giving services in both barbers and beauty salons. But a study done in Jimma Town showed all of them were male [16]. This big difference might be due to culture and Religious difference in d/t Regions of our country. Concerning educational status; secondary school and above 74.1%, and primary school were 17.2%. On the other hand 70% succeeded junior school and above as steady done in Jimma showed and 66.7% respondents have secondary school education for another study in Nigeria [17]. When we compare concerning educational status of barbers and beauty salons in Hosanna Town with that of Jimma nearly the same educational status. But for study done in Nigeria there is difference it might be due to educational coverage was not the same for different countries.

Barbers and beauty salons that had taken training for their job were 31% and for study done in Jimma none of them were trained [16]. On working processes 70.3% of them con fronted bleeding accidents due to cut or piercing or any damage from the instruments they were using to barber or client in the previous two months. 61.7% of them have given a service for client's skin lesions on their head in the previous two weeks. Barbers and beauty salons that had skin lesions on their hand in the previous two months were 65.4% .This is contradicted with that of Jimma study which showed bleeding accidents due to cut or piercing or any damage from instruments using 37%, clients coming with skin lesions on their head 58% and Barbers and beauty salons that had skin lesion son their head in the previous two month 26%. But accidental cuts observed in 3.3% only and blade to scalp contact in 100% according to study done in Nigeria [17].

Skin damage occurs during barbering either as an accidental cut or abrasion as a result of blade to skin contact. Or both blade- to-scalp contacts often occur during hair shaping, shaving and haircutting involving non-use of detachable plastic comb [18].

Minor cuts during barbering seem to have become a common accident as it has variously been reported in previous studies [12,2].

Instruments used include scissors 77.7%, electrical shaver 49.4%, and razor blades 39.5% and scalpel 27.1% as this study showed. Similar instruments used for Jimma study except difference in percentage; scissors 50%, electrical shaver 97%, razor blades 93%. This study Revealed that all Barbers and beauty salons heard about HIV/AIDS. This is consistent with Jimma study and the same is true for study done in Nigeria. For our study the source of Information was from Health professionals for 18.5% but The source of Information about HIV from Health professional was 65% according to study done in Jimma Town [16].

This study showed most are aware about HIV Transmission because they respond the mode of transmission as blood contact 87.7%, unsterile injection 90.1%. the Results of Jimma showed almost the same result (80%) have knowledge level of good and also true for study done in Nigeria which shows 84.1% knew that HIV could be transmitted by sharing non-sterile sharp instruments. Prevention of Pregnant mother to child Transmission of HIV/AIDS (PMTCT) is not sufficiently known among Barbers and Beauty salons (only 25.9%) knew about PMTCT. But PMTCT service is given in both Hossana Hospital and Health center. Since health personnel's are more aware of this type of transmission it must currently being emphasized in Health Education.

False information on HIV/AIDS is another important problem according to the findings of this study. The common incorrect information on the transmission of HIV/AIDS is that the disease may be transmitted by insect bite (40.7%), living together (18.5%) and kissing (56.8%). Others explained the type of kissing and the health status of the mouth can be the reason for the Infection.

Methods they were using for prevention of HIV/AIDS was abstinence (16%) using condom (18.5%), one to one correspondence (51.8%) and pray (13.5%). some of them were using pray as prevention of HIV/AIDS as this study shows and the same is true for study done In Jimma 9% of study subjects gave their opinions saying "God's sacrament to the people as punishment". really this shows HIV prevention needs religious leaders to have participate in the dissemination of Health Education. even if all Barbers and Beauty salon heard about HIV/AIDS, they didn't know their professions expose them to HIV (53%). Other studies showed similar problem. Study done in Nigeria 62.2% didn't know barbers were at risk of HIV infection and the same is true for study done in Cameroon [19].

Other high-risk group for HIV/AIDS include commercial sex workers, Barbers and women hair dressers. These groups are very important in attempts to control the HIV/AIDS in the community, and need to be more targeted by the media [20].

Most of the barbers and Beauty salons use the same brush 81.4% and using new gloves during giving service for each client was 9.8% only. This might be leads to high risk for HIV/AIDS Transmission. When we see other studies, In Nigeria 51.7% use the same brush for cleaning for each client and study In Cameron shows 2% use the same gloves for each [17,19].

Methods they use for disinfection is not satisfactory because 51.3% use soap Berkina, 37% alcohol, 4.9% combination of these. Concerning

sterilization methods using hand held Flame 23.4%, boiling for 20 minutes starting when water starts to roll 13.5%. A study done in Nigeria showed use of sterilization 10%, disinfections 72.5% and no decontamination at all 17.5% declared [17]. Here what we can observe is that inappropriate disinfections observed this could be leads to transmission of HIV. Also a study done in Cameroon showed 90% are not full of hygienic rules (single Razor blade for about 10 persons) used without sterilization [19]. Comparing with this study similar outcome indicated the only difference is percentage.

High knowledge level whether resulted in good behavioural changes and practices needs another qualitative Research to Identity more risk groups. The time interval they used for disinfection and sterilization as follows; every session for each client 28.4%, weekly 35.8%, once in day 22.2% and the rest every two weeks and monthly 13.6% according to this study.

This study shows that the frequency and quality of Instruments decontamination practices of the respondents in relation to HIV prevention is not satisfactory. In appropriate practices may be due to lack of practical knowledge about decontamination and potency of disinfectants. However the principle of 'universal precautions' considers all blood and body fluids to be potentially infectious and all invasive instruments to be potentially contaminated [15].

Barbers and Beauty salons Dispose hair particles, sharp objects and wastes to open filed 53%, municipality service 21%, Burned 16%, buried in pit 9.8%. Another possible reason for the poor HIV prevention practice may be the lack of strict control measures and monitoring by relevant bodies. In developed countries activities of barbers are regulated through a compressive training licensing and monitoring programmers [14].

49.4% of the barbers and Beauty salon shops didn't have windows, 53% of the illumination of the room (by natural light) were bad additionally clean less of the shop (floor, wall, roof) bad 65.4%. Around 65.4% didn't have Latrine facility. From this we observe that illumination poor or no window means accidental cuts might be happened which facilitate risk for HIV Transmission.

The activities of non-governmental organizations consist of providing information on HIV/AIDS to the community, counselling to people who need information on HIV/AIDS, helping the victims to be treated, and conducting studies on the knowledge, attitude and practice of risk groups [20]. there is association between dependent variable equipment's Sterilized every session for each client and independent variables religious, income, age and use of Mass media (T.V., radio Newspaper posters). But for the rest educational status and sex there is no association observed. From this possible to conclude that Religious leader's involvement on HIV prevention and control is mandatory. Expanding mass media uses including posters distribution have to be facilitated. In other studies no association declared.

Finally this study showed Methods they use for sterilization is not satisfactory. This shows poor sanitation and improper handling of Barbering procedure leads to risk of HIV/AIDS for both clients and barbers. I think all in all less attention or not at all given to Barbers and Beauty salons concerning barbering procedure they follow. So that concerned body has to think over it.

## Strength of the Study

This study was using primary data which was collected by the investigators and full participation of the respondents. This primary

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data collected by investigators may increase the accuracy of it. A time line is also other strength of this study. This study can be baseline main source of data for further study on this title.

## Limitation of the study

The exact figure of HIV prevalence rate and number of peoples living with HIV/AIDS recently are not known in Hossana Town. Qualitative study was not done. Shortage of budget and time.

# Conclusion

This study has revealed that good knowledge and positive attitude towards Transmit ion and prevention of HIV/AIDS among Barbers and Beauty salons. But the barbering procedure in the study area has the risk for HIV transmission through the use of non- potent disinfection methods and improper handling of sharp instruments. In addition, there were bladesto-scalp contacts in most of the sessions and poor usage of glove during services. Again use of the same brush for each client observed. Additionally most of them dispose wastes to open field. This should be of great concern to effectively control HIV/AIDS in our country. Religious, income, age and using Mass media (T.V., radio Newspaper posters) were significant predictors associated with equipment's Sterilization for each client served. Therefore barbers and beauty salons could serve as core group for indirect transmission of HIV/AIDS.

# Recommendation

HIV prevention strategies for barbers and beauty salons should be planed and implemented by concerned body. Full attention should be given to poor hygienic practices in barbers and Beauty Salon shop through routine supervision and monitoring by Zonal Health Desk and Hossana Town Administration Health office including trade and tourism Authority. Appropriate Training should be given for barbers and Beauty salon workers. Effective and extensive Health Education on HIV/AIDS should be given for Barbers and Beauty salon workers by Responsible Authorities. Religious leader's involvement is necessary for HIV prevention and control.

Correct Sterilization and handling procedure for equipment's used by Barbers and Beauty salon workers have to control monitored by concerned body.

Information education and communication (IEC) should be given to Barbers and Beauty salon workers by concerned government bodies. Proper and adequate waste disposal systems should be provided and controlled by Hossana Town Municipality and concerned bodies.

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