



## Perception and Practice of HIV/AIDS Prevention among Female Beauticians in Sagamu Local Government Area of Ogun State, Southwest Nigeria

Adekunle Durojaiye Alabi\*

Department of Community Medicine and Primary Care, Olabisi Onabanjo University Teaching Hospital, Nigeria

\*Corresponding author: Adekunle Durojaiye Alabi (MBBS, MPH, FWACP Community Health), Department of Community Medicine and Primary Care, Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria, Tel: +2348034468258, E-mail: [drkalabi@yahoo.com](mailto:drkalabi@yahoo.com)

### Abstract

Nigeria has the third highest number of people living with HIV and prevalence among young women 15-24 years is high. Beauticians constitute a high risk group since their work involves the use of sharp instruments. This study was carried out to assess how female beauticians perceive HIV and their prevention of the disease in Sagamu Local Government Area, Ogun State, Southwest Nigeria.

A cross-sectional descriptive study was carried out using semi-structured, interviewer-administered questionnaires among 288 beauticians selected by multi-stage sampling. Data was analyzed using SPSS version 16.

The awareness of HIV/AIDS among respondents was 97.9%. Sexual intercourse, sharp instruments and blood transfusion were identified as possible means of HIV transmission by 95.5%, 96.2% and 85.8% of respondents respectively. 86.1% of the respondents were aware of the fatality of HIV/AIDS. 94.1% knew it was important to know their HIV status. 93.4% were aware of the risk of getting infected via their job. Majority of the respondents believe in disinfection/sterilization of sharp instruments out of which 68.8% use hot water, 28.1% use disinfectants, 18.8% use soap, 14.4% use sterilizing lotions and 8.3% use shampoo and conditioner. Despite the high level of awareness, 42.2% have never attended a seminar on HIV/AIDS prevention and 18.2% of the respondents still share the same sharp instruments among different customers.

More awareness through the media, health workers and the beauticians' association is needed on the practice of preventive measures as regards HIV/AIDS. Customers should also be encouraged to take their personal sharp instruments to the salon. In conclusion, though the perception of beauticians in Sagamu Local Government Area, Ogun State, Southwest Nigeria about HIV is high, more work is required in the area of prevention of HIV transmission.

### Keywords

Perception, Practice, Female, Beautician, Prevention, HIV/AIDS, Nigeria

### Introduction

The effects of occupation and health on each another can be either beneficial or adverse [1]. The increasing demand for social acceptance has seen a soar in the beauty industry [2]. Beauticians have devised diverse means of helping their clients improve their

appearance and indeed their self-esteem, however, the occasional use of sharp instruments to achieve this puts them at high risk of infectious diseases [3,4]. In Nigeria, the beauty industry is dominated by young females [5].

Acquired immune deficiency syndrome (AIDS) is an infectious disease caused by the Human immunodeficiency virus (HIV) which has been one of the greatest challenges throughout human history as it has no definitive cure [6]. Globally, almost 75 million people have been infected with the HIV virus and about 36 million people have died of HIV since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history [7-9].

Nigeria is Africa's most populous nation and is home to more people living with HIV than any other country in the world, after South Africa [10,11]. In Nigeria, HIV prevalence among young women aged 15-24 years is estimated to be higher than among men of the same age, with females constituting about 60% of persons living with HIV [10]. Considering the role of females, the burden of the disease on families and households is staggering.

As there is no cure for the infection, prevention is the only viable way to control HIV spread. In Nigeria, efforts have focused mainly on prevention of HIV through sex, blood transfusion and mother-to-child transmission because more than 90% of HIV/AIDS transmissions occur through these routes [12,13]. However, HIV transmission through sharing of non-sterile sharp instruments such as those used for barbing, circumcision, facial scarification, incisions, 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 [14,15].

Beauticians are at high risk of infection by HIV and other blood-borne pathogens from exposure to their clients. Though they do not carry out procedures that deliberately penetrate the skin, the procedures can inadvertently damage the skin through abrasion or accidental cuts [5,16]. Due to the lipid envelope that protects HIV from dehydration, the virus can survive on the surfaces of sharp instruments for a period long enough for transmission to occur particularly in salons [17,18]. The present study was therefore aimed at assessing the perception and practice of the preventive measures of HIV/AIDS among beauticians in Sagamu local government area of Ogun state.

**Citation:** Alabi AD (2016) Perception and Practice of HIV/AIDS Prevention among Female Beauticians in Sagamu Local Government Area of Ogun State, Southwest Nigeria. J Fam Med Dis Prev 2:031

**Received:** February 22, 2016; **Accepted:** April 07, 2016; **Published:** April 11, 2016

**Copyright:** © 2016 Alabi AD. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Table 1:** Socio-demographic data.

Age (years)	Frequency	Percentage
10-20	84	29.2
21-30	128	44.4
31-40	64	22.2
41-50	11	3.8
51-60	1	0.3
Marital Status	Frequency	Percentage
Single	120	41.7
Married	167	58.0
Separated	1	0.3
Religion	Frequency	Percentage
Christianity	189	65.6
Islam	99	34.4
Tribe	Frequency	Percentage
Yoruba	266	92.4
Igbo	11	3.8
Hausa	1	0.3
Others	10	3.5
Level of Education	Frequency	Percentage
No Formal Education	12	4.2
Primary Education	45	15.6
Secondary Education	220	76.4
Tertiary Education	11	3.8
Total	288	100

Mean age of respondents was 26.5 ± 7.7 years with the predominant age group being 21-30 years.

**Table 2:** Knowledge of HIV/AIDS prevention.

Awareness about HIV/AIDS	Frequency	Percentage
Yes	282	97.9
No	6	2.1
Awareness about HIV/AIDS counselling and testing	Frequency	Percentage
Yes	168	58.3
No	120	41.7
Source of Information	Frequency	Percentage
Radio	209	72.6
Television	200	69.4
Religious Centres	70	24.3
Health Workers	132	45.8
Spouse	23	8.0
Knowledge of how the disease is transmitted	Frequency	Percentage
Sexual Intercourse	275	95.5
Sharp Instrument	277	96.2
Blood Transfusion	247	85.8
Sharing of Kitchen Utensils	96	33.3
Sharing Toilet	111	38.5
Is knowing your HIV status important?	Frequency	Percentage
Yes	271	94.1
No	9	3.1
Not sure	8	2.8
Total	288	100

About half of the respondents (51.3%) have heard about HCT.

## Materials and Methods

### Study Area

Sagamu local government is one of the 20 local government areas in Ogun State, Southwest Nigeria. The local government has an area of 614 km<sup>2</sup> and a projected population of about 255,885 in 2016 [19]. Beauticians are registered under the four zones within the local government.

### Study design

Descriptive cross-sectional study was carried out among randomly selected beauticians in Sagamu local government area, Ogun State, Nigeria.

### Sampling technique

The sample size for this study was determined using the

**Table 3:** Perception of HIV/AIDS prevention.

Perception of severity of HIV/AIDS	Frequency	Percentage
Strongly Agree	195	67.7
Agree	77	26.7
Indifferent	11	3.8
Disagree	4	1.4
Strongly Disagree	1	0.3
Perception about the need for people living with HIV/AIDS to live in isolation	Frequency	Percentage
Strongly Agree	28	9.7
Agree	35	12.2
Indifferent	18	6.3
Disagree	89	30.9
Strongly Disagree	118	41.0
Total	288	100

67.7% strongly agree that HIV is severe disease, while 41.0% of the respondents strongly disagree that people living with the disease should be isolated from apparently healthy people.

formula for estimation of population prevalence [20] using 95% confidence interval. A prevalence of knowledge gap about HIV/AIDS in a previous study 20% [21] was also used with a desirable degree of accuracy set at 0.05 level. Minimum sample size of 246 was calculated, and 295 questionnaires were administered. However, 288 respondents accepted to participate in the study. Multistage sampling technique was used to select respondents for the study. At the zonal level, simple random sampling was used to select two zones. Within these two zones, systematic random sampling was used to select the beauticians. Only female beauticians registered and working in Sagamu local government area were eligible for this study.

### Study instrument

Data was collected using pre-designed, semi-structured, interviewer-administered questionnaires. The questionnaire was adapted from a similar study [5] and pre-tested in Ikenne, a neighbouring local government area within the same state. Necessary corrections were then made to finalise the validation of the study instrument.

### Data analysis

Data was cleaned, collated and analysed using Statistical Package for Social Sciences (SPSS) software, version 16. Frequencies and percentages were calculated. Descriptive analysis was done using means and standard deviations.

## Results

The predominant age group of the respondents was 21-30 years (Table 1) with the mean age of 26.5 ± 7.7 years. Majority of the respondents were married (58%) (Table 1), and over half (65.5%) practice Christianity (Table 1). Almost all of the respondents (92.4%) were of the Yoruba tribe and about three-quarters (76.4%) of the respondents had secondary school education (Table 1).

Majority of the respondents (97.9%) had heard about HIV/AIDS (Table 2). More than half of the respondents (58.3%) had heard about HIV/AIDS counselling and testing while 41.7% had not heard about it (Table 2). 72.6% of the respondents heard about HIV/AIDS via the Radio, 69.4% via television, 24.3% at religious centres, 45.8% from health workers and 8% through their Spouses (Table 2).

Almost all the respondents (95.5%) believed that HIV is transmitted through sexual intercourse, 85.8% believed it is transmitted through sharing of sharp objects, 33.3% believe it is transmitted through sharing of kitchen utensils and 38.5% believe it is transmitted through sharing of toilets (Table 3). 94.1% believed that it is important for one to know his/her HIV status, 3.1% did not believe it was important and 2% were not sure (Table 3). 67.7% of the respondents strongly agreed that HIV is a severe disease, while 41% of the respondents strongly disagreed that people living with the disease should live separate lives away from others (Table 3).

Majority of the respondents (86.1%) believed that a person can die

**Table 4:** Practice of HIV/AIDS prevention.

Sterilization methods	Frequency	Percentages
Hot Water	198	68.8
Sterilizing lotions	41	14.2
Bar soaps	54	18.8
powdered detergents	69	24
Disinfectants (e.g. Dettol, Izal)	81	28.1
Shampoo and Conditioner	24	8.3
Practice of not sharing instruments	Frequency	Percentages
Yes	225	81.8
No	50	18.2
Total	275	100
Disposal of sharp instruments	Frequency	Percentages
Dustbin	163	56.6
Gutter	64	22.2
Toilet	46	16
Burying	6	2.1
Give to client	17	5.9
Attendance of HIV/AIDS prevention seminar(s)	Frequency	Percentages
Never	121	42
This year	64	22.2
Last year	84	29.2
2 years or more	19	6.6
Total	288	100

18.2% of the respondents still share sharp instruments among clients, and 68.8% of them use just hot water to sterilize their instruments.

from HIV/AIDS, and almost all the respondents (93.4%) believed that they can be infected via their job exposures. 98.6% of the respondents believe in the disinfection/sterilization of instruments. In addition, 84% of the respondents did not support the use of the same sharp instruments (such as blades and needles) for different customers.

68.8% of the respondents sterilize their sharp instruments using hot water, 28.1% with disinfectants, 24% with detergents, 18.8% use sterilizing lotions while 8.3% use shampoos and conditioners (Table 4). 81.8% of the respondents do not share needles among different customers, while 18.2% still do (Table 4). To dispose of sharp instruments, 56.6% of the respondents throw them into the dustbin, 22.2% into the gutter/drainage, 16% into the toilet, 2.1% bury theirs, while 5.9% give them to the customers (Table 4). 42% had never attended any HIV/AIDS prevention seminar, 22.2% attended last year, 29.2% attended last year while 6.6% attended 2 years ago (Table 4).

## Discussion

Majority of the respondents in this study were between ages 21-31 years (44.4%) with a mean age of  $26 \pm 7.7$  years. This is less than 29  $\pm$  6.9 years reported from a similar study in Ibadan [22]. This age group, the most economically productive age group in the society, has been highly implicated for HIV risk in other studies within and outside Nigeria [23,24]. About three quarters (76.4%) of the respondents attained up to secondary school education. This is high compared with a study done in Sokoto, Northern Nigeria, where a low level of literacy was observed [25].

Almost all (97.9%) of the respondents had heard about HIV/AIDS. This level of awareness is similar to those observed in studies done in Ibadan, south west Nigeria [22,26]. As with the present study, mass media was the major source of information on HIV/AIDS. On the transmission of the disease, 95.5% of the respondents believe that HIV is transmitted through sexual intercourse which is higher than 85.4% observed in the Sokoto study [25]. A larger proportion of the respondents 85.8% were aware that HIV can be transmitted through blood transfusion as against 66.4% in the Sokoto study [25]. However, there were few misconceptions about HIV transmission, as 33.3% believed that it is transmitted through sharing of kitchen utensils, while 38.5% assumed that it is transmitted through the sharing of toilets. Previous studies among undergraduate students in Nigeria had reported similar misconceptions [27].

Perception of the fatality of HIV/AIDS among the beauticians was high, as majority (86.1%) of the respondents knew that a person can die from HIV/AIDS. However, few of the beauticians (7.3%) were ignorant of this fact. Despite the 94.1% of respondents who agreed that it is important for one to know his/her HIV status, only 53.8% knew their status. This percentage is however higher compared to 29% reported in a study among artisans in Ogbomosho [28]. Majority of the beauticians are aware that they are at risk of contracting HIV infection through their Job compared to a similar study in Sokoto [25].

Almost all the respondents (98.6%) believe in disinfection/sterilization of instruments as compared to the 59.5% in a study done amongst barbers in Ethiopia [21]. More than half (68.8%) of the respondents sterilise their instruments using heat, 24% use powdered detergents, 18.8% use bar soaps, 8.1% use disinfectants, while 8.3% use shampoos and conditioners. However, a study carried out by Biadgelegn *et al.* in Ethiopia [21] showed that majority of the respondents (92.6%) use heat to sterilize their sharp instruments. About 16% of the respondents still engage in reuse of needles among their clients. This could expose them to risk of contracting HIV infection [21]. The method of sharps disposal shows that 56.6% of the respondents throw their used (non-sterilisable) sharp instruments into the general dustbin, 22.2% into the drainage/gutter, 16% into the toilet, 2.1% burn or bury their needles and 5.9% return/give them to the customer. Interventions are necessary to educate beauticians on the risks involved in such acts and on safe practices at work. Some lessons can be learnt from Ethiopia [21] where disposable instruments are used. Since 57.7% of the respondents reported that their customers come with their personal needles, this implies that most customers at beautician salons are aware of the risk involved with sharing needles and other sharp instruments. In addition, this study revealed a disturbing fact that 42% of the beauticians have never attended any HIV/AIDS prevention seminar despite their risk of infection through their Job.

## Conclusion

This study revealed a high level of awareness and positive attitude amongst beauticians on HIV/AIDS and the major means by which it can be transmitted in the society, though some levels of misconceptions about means of transmission need to be addressed urgently. It was also observed that a large number of them were aware of the huge risks of getting infected via their Job and thus take the necessary precautions to protect themselves. The preventive measures include the disinfection and sterilization, the practice of not sharing needles among customers and being careful while attending to customers.

A considerable number of the respondents have not attended any seminar on HIV/AIDS and have not heard about HIV/AIDS counselling and testing. Also to maximize profit, some Hairdressers use the same needles for customers who do not come with their own sharp instrument like needles and razors. This portrays bad practice which only aids in the transmission of HIV. It is therefore recommended that government should create an enabling environment with necessary support to aid the health-workers and the hairdressers association in organizing seminars and program for hairdressers on preventive measures against HIV/AIDS.

## Limitations of the study

This study was a descriptive, cross-sectional study. A follow-up intervention study will be necessary to bridge the gaps observed in the perception and practice of HIV/AIDS prevention among female beauticians in Sagamu local government area.

## Acknowledgement

The author acknowledges the support of the Health Authority and the Association of Beauticians in Sagamu local government area, Southwest Nigeria.

## Ethical Statement

Ethical approval for the study was obtained from the ethical and scientific committee of the local government health authority. Approval to carry out this study was also obtained from the President of the Association of Beauticians in Sagamu Local Government Area. Written consent was obtained from the respondents and confidentiality was ensured.

## References

1. Creek J, Hughes A (2008) Occupation and health: A review of selected literature. *British Journal of Occupational Therapy* 71: 456-468.
2. Warhurst C (2011) Beauty Imagined: A History of the Global Beauty Industry. *AdmSci Q* 56: 314-316.
3. Johnson IL, Dwyer JJ, Rusen ID, Shahin R, Yaffe B (2001) Survey of infection control procedures at manicure and pedicure establishments in North York. *Can J Public Health* 92: 134-137.
4. Karmochkine M, Carrat F, Dos Santos O, Cacoub P, Raguin G (2006) A case-control study of risk factors for hepatitis C infection in patients with unexplained routes of infection. *J Viral Hepat* 13: 775-782.
5. Okojie O, Isah E (2001) Assessment of occupational hazards among beauticians in Benin-city. *Niger J Clin Pract* 4:25-27.
6. Moss JA (2013) HIV/AIDS Review. *Radiol Technol* 84: 247-267.
7. Unaid (2013) GLOBAL REPORT: UNAIDS report on the global AIDS epidemic 2013 [Internet]. Unaid 198.
8. Lathrop E, Jamieson DJ, Danel I (2014) HIV and maternal mortality. *Int J Gynaecol Obstet* 127: 213-215.
9. Maartens G, Celum C, Lewin SR (2014) HIV infection: epidemiology, pathogenesis, treatment, and prevention. *Lancet* 384: 258-271.
10. Bashorun A, Nguku P, Kawu I, Ngige E, Ogundiran A, et al. (2014) A description of HIV prevalence trends in Nigeria from 2001 to 2010: what is the progress, where is the problem? *Pan Afr Med J* 18 Suppl 1: 3.
11. Cooper D, Mantell JE, Moodley J, Mall S (2015) The HIV epidemic and sexual and reproductive health policy integration: views of South African policymakers. *BMC Public Health* 15: 217.
12. Udoh IA, Mantell JE, Sandfort T, Eighmy MA (2009) Potential pathways to HIV/AIDS transmission in the Niger Delta of Nigeria: poverty, migration and commercial sex. *AIDS Care* 21: 567-574.
13. Iwelunmor J, Ezeanolue EE, Airhihenbuwa CO, Obiefune MC, Ezeanolue CO, et al. (2014) Socio-cultural factors influencing the prevention of mother-to-child transmission of HIV in Nigeria: a synthesis of the literature. *BMC Public Health* 14: 771.
14. Isiugo-Abanihe UC (2006) Sociocultural aspects of HIV/AIDS infection in Nigeria. *Afr J Med MedSci* 35 Suppl: 45-55.
15. Sadoh AE, Sadoh WE, Idaoriyekemwen NJ (2011) HIV co-infection with hepatitis B and C viruses among Nigerian children in an antiretroviral treatment programme. *South African J Child Heal* 5: 7-10.
16. Lewis YR, Shain L, Quinn SC, Turner K, Moore T (2002) Building community trust: Lessons from an STD/HIV peer educator program with African American barbers and beauticians. *Health Promot Pract* 3: 133-143.
17. Malim MH, Emerman M (2008) HIV-1 accessory proteins--ensuring viral survival in a hostile environment. *Cell Host Microbe* 3: 388-398.
18. Subramaniam S (2013) Structure of trimeric HIV-1 envelope glycoproteins. *Proc Natl Acad Sci U S A* 110: E4172-4174.
19. Blomquist KB (2006) Health, education, work, and independence of young adults with disabilities. *Orthop Nurs* 25: 168-187.
20. Araoye M (2003) Research methodology with statistics for health and social sciences. Ilorin: Nathadex Publishers 119-120.
21. Biadagelegn F, Belyhun Y, Anagaw B, Woldeyohannes D, Moges F, et al. (2012) Potential risk of HIV transmission in barbering practice in Ethiopia: from public health and microbiological perspectives. *BMC Public Health* 12: 707.
22. Omokhodion FO, Balogun MO, Ola-Olorun FM (2009) Reported occupational hazards and illnesses among hairdressers in Ibadan, Southwest Nigeria. *West Afr J Med* 28: 20-23.
23. Edet O, Edet E, Samson-Akpan P, Ndifon W (2012) HIV/AIDS-related knowledge, attitudes and social distance towards people living with HIV/AIDS (PLWHA) among undergraduates students in calabar. *Int J Life Sci pharma Res* 2: 41-56.
24. Oppong Asante K, Oti-Boadi M (2013) HIV/AIDS knowledge among undergraduate university students: implications for health education programs in Ghana. *Afr Health Sci* 13: 270-277.
25. Ibrahim MT, Opara WE, Tanimomo T (2007) Knowledge of HIV/AIDS, Infection Prevention Practices and Accidental Skin Cuts in Barbing Saloons in Sokoto, Nigeria. *Niger Med Pract* 51: 123-127.
26. Oye-Adeniran BA, Aina OF, Gbadegesin A, Ekanem EE (2014) Substance use and sexual behaviour among female students in Nigerian universities. *Int Q Community Health Educ* 35: 73-83.
27. Imaledo JA, Peter-Kio OB, Asuquo EO (2012) Pattern of risky sexual behavior and associated factors among undergraduate students of the University of Port Harcourt, Rivers State, Nigeria. *Pan Afr Med J* 12: 97.
28. Arinola AA, Adekunjo OA (2012) Analysis of HIV/AIDS Information Awareness and Effectiveness Among Artisans in Ogbomosho , Oyo State, Nigeria. *Libr Philos Pract* 2:Paper 696.