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Examination of the Practices of Itinerant Beauty Workers and their Concomitant Effects in Nigeria

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Abstract

Itinerant beauty workers consisting of mobile hairdressers, nail technicians, and skin care providers, among others, usually offer cosmetic and personal grooming services such as pedicure, and manicure, without operating from a fixed salon or professional establishment. In Nigeria, and in the Southeast and South-south regions, large proportions of the populace patronize these beauty providers, due to their affordability and convenience, especially in urban and semi-urban areas. However, their operations often occur in uncontrolled environments with limited access to sanitation facilities and inadequate adherence to hygiene protocols. It is against this backdrop, that this study examined the practices of itinerant beauty workers and their implications in three states: Abia, Enugu and Delta states. Using a mixed-methods approach and a sample of 200- 50 Itinerant Workers and 150 Clients- the study aimed to identify widespread practices such as reuse of unsterilized tools, poor hand hygiene, use of expired or low-quality cosmetic products, re-use of the same towels for different clients, and lack of protective gear. It further explored the extent to which clients were aware of the health risks associated with patronizing itinerant beauticians and assessed clients' attitude towards these risks. A questionnaire titled "Itinerant Workers Practices and Clients Attitude Questionnaire" (IWPCAQ). The study found that adherence to proper hygiene was inadequate among itinerant beauty practitioners in their common beauty practices; nevertheless, clients were knowledgeable and generally aware of the health risks that are likely is such beauty places. Also, the clients had positive attitude toward good sanitation practice and were willing to recommend itinerant operators who adhered to proper hygiene. The paper therefore recommended among others, the need for clients to own their personal needles, clippers, manicure sets, make-up kits, etc., and to take these along with them during beauty sessions to avoid the health hazards common with itinerant workplaces.

Keywords: *Itinerant Worker, Cosmetics, Beauty Providers, Concomitant effects, Hygiene*

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Background to the Study

The informal beauty sector in Nigeria consisting of mobile barbers, hairdressers, nail technicians, cosmetic product vendors and makeup artists who work door-to-door or at temporary roadside stations, has continued to expand rapidly alongside urbanization and youth under-employment. This is because as a norm, human beings have an inherent tendency to pursue beauty, frequently engaging in efforts to refine their existing attributes or to adopt an entirely new appearance. (Imoro, 2015). In every work environment however, the safety of clients, staff and the public is of crucial concern to the success of the enterprise. Unfortunately, majority of itinerant workers typically operate outside formal regulation, with limited access to infection-prevention supplies, sterilization equipment, or routine inspections. In high-burden settings like Nigeria, the public-health risks concentrate around blood- and body-fluid exposure from sharp instruments (clippers, razors, and cuticle tools), skin barrier disruption, and use of hazardous cosmetic chemicals. The World Health Organization (WHO) estimates 254 million people were living with chronic hepatitis B (HBV) in 2022 and explicitly identifies exposures to contaminated sharp instruments as a transmission route, an exposure that can plausibly occur in informal beauty services (WHO, 2025).

The equipment for a salon depends largely on the services on the type of services offered. Some of the basic equipment required for establishing a hairdressing salon for example, includes washing basin, styling chair, hair driers, supply trolleys and manicure sets and aprons which requires usage understanding. Others include shampoo spray machines; facial bed, hair steaming machines, other body/skin care and such facilities as sterilizers, waste disposal systems, electricity, fire extinguishers, first aid materials and water supply systems. According to the Health and Safety Executive, a salon is as safe as the owner makes it (Imoro, 2015).

Within Nigeria, national and regional data indicate a substantial HBV burden (recent profiles synthesize 2022 estimates and policy targets), making lapses in basic infection prevention and control (IPC) in community settings particularly consequential. Nigeria's current strategic framework for viral hepatitis (2022–2030) recognizes community-level prevention gaps and the need for broader risk-reduction outside hospitals, which by implication includes high-contact personal services such as barbering and beauty care common in the informal economy (FMH, 2022).

Empirical studies, though uneven and often local, consistently document hygiene and sterilization challenges around beauty practitioners and shared tools. Nigerian investigations have cultured potentially pathogenic bacteria from clippers used by barbers and found inconsistent and often incorrect disinfection (e.g., brief dips in methylated spirit or bleach between clients). Observational and cross-sectional work in Benue, Delta, Edo and Rivers States for example, highlights gaps in knowledge and practice regarding HBV and tool sterilization among barbers, with many reporting sterilizations only intermittently or for insufficient contact times (Eribo, Ebiala, Oyedoh and Oshodin, 2018; Adomi, 2020; Ogbeyi, Jenewari, Ogbeyi, Afolaranmi, Aba & Ikpom, 2021). These findings align with recent international reviews that flag beauty venues as plausible sites for blood-borne pathogen

transmission when sterilization is inadequate. Thus, the convergence of frequent skin-penetrating or abrading procedures, as well as mobile service delivery with limited oversight, creates a credible, under-studied pathway for infections (HBV/HCV and bacterial/dermatophytid disease) and toxic exposures among Nigerians who patronize itinerant beauty services.

In Brazil, a survey carried out on the adherence and knowledge about the use of personal protective equipment among manicurists, indicated poor adherence to personal protective equipment Garbaccio and Cristina de Oliveira (2015). The authors observed that when caring for nails, accidents with sharpened tools are common to occur, reaching the vascular bed during the removal of the eponychium (cuticle) with pliers may lead to transmission of bloodborne pathogens such as hepatitis B virus (HBV), C virus (HCV) and HIV (3). Hence, microbial cross-transmission can occur between clients, among professionals, from clients to professional and vice versa. According to Aydin, Aksoy and Ceylan (2020), there is very limited data on the risks of infection related to the care services in beauty and hairdressing salons. Hepatitis B, C, HIV, fungus, and influenza, etc., diseases can be quite high in hairdressers. Infection agents, infected people's body fluids, dried blood drops, needles, dishwashing surfaces, injectors, shaving blades can survive for a long time (Aksoy A, Ozdarendeli, 2006). Thus, fungal infections in the skin, such as hair and nail attachments, are very common, and can be spread via transmission routes like; cutting, coloring, curl, straightening with heat or loosening chemicals, blow-drying, lengthening, scalp treatments or hair treatments (Marco, 2000 cited in Aydin, Aksoy and Ceylan, 2020). Marco (2000) cited in Aydin, Aksoy and Ceylan (2020) further points out that, although the risk of contamination in hairstyling is low, procedures that require the use of a razor carry a higher risk of contamination. Open wounds may pose a greater risk for the entry of microorganisms. Since manicure and pedicure involve various procedures, such as cutting the skin or nail slots (eponychium) and rubbing the skin (dermis), the risk of infection may increase in the case of an open wound. Waxing processes can also cause the integrity of the skin to deteriorate.

A study by Enemuor (2013) to evaluate bacterial and fungal contamination in hairdressing and beauty salons in Anyigba - a university community in Nigeria, employed the collection of samples from combs, brushes, hair stretchers, rollers and hairpins and processed according to standard procedures. The isolates obtained were examined and identified using microscopic examination, colonial morphology and biochemical characteristics. Five bacterial and six fungal species were isolated and identified. The presence of these potential pathogens simply indicated that hairdressing and beauty salons could be contributing to the spread of infection. In another study by Abubakar et al (2017), on the perceptions and practices related to health hazards of patronizing traditional nail cutters and barbers among market men in Northwestern Nigeria, the findings indicated that majority 146 (63.2%) had no knowledge of HBV and HCV infections and did not know they are health hazards associated with nail cutting and barbing. Nzaka, Ezeruigbo and Ojone (2017) equally undertook a cross-sectional study to determine the level of knowledge and the practice of instrument sterilization amongst barbers in PRESCO campus of Ebonyi State University Abakiliki and

found that only 10 (25%) had accurate knowledge and were aware of the need to sterilize instrument after use on each customer.

Consequently, when practitioners in the cosmetics and beauty industry do not know and/or do not adhere to safety best practices, they increase their chances, as well as that of their clients, being exposed to microorganisms by direct or indirect contact, through skin mucosa, dermal or percutaneous, for instance when the skin suffers abrasions, desquamation, perforations and ocular mucosa affected by nail fragments (Garbaccio and Cristina de Oliveira, 2015). In view of this development in the industry, the industry requires special attention everywhere in the world. By implication, issues relating to care of tools, safety precaution before, during and after use of equipment, as well as overall hygienic practices in the beauty industry require special attention from all angles.

Itinerant beauty workers consisting of mobile hairdressers, nail technicians, and skin care providers, among others, usually offer cosmetic and personal grooming services such as pedicure, and manicure, without operating from a fixed salon or professional establishment. They travel to clients' homes, public spaces like markets, streets, or bus stops, or operate temporarily from informal setups such as roadside stalls, under umbrellas, or in makeshift shelters. In Nigeria, large proportions of the populace patronize these beauty providers, due to their affordability and convenience, especially in urban and semi-urban areas. However, their operations often occur in uncontrolled environments with limited access to sanitation facilities and inadequate adherence to hygiene protocols. Thus, if towels, apron, brush, combs, clippers, razors, and nail cutters are used on an infected client successively without proper cleaning and disinfection, the likelihood of spreading infectious diseases or infestation is almost certain. Unsafe beauty practices among itinerant workers remain largely unregulated and poorly characterized. Evidence from most states in Nigeria shows inconsistent sterilization of shared instruments and documented microbial contamination of beauty equipment; however, practices among mobile (non-shop-based) providers, who face additional constraints such as lack of running water, autoclaves, or validated disinfectants have not been systematically mapped. Therefore, there is a critical need for investigation that identifies these common practices, measures the clients' level of awareness of the risk associated with these practices, and assess their attitudes towards these risks. Evidence from the findings can inform pragmatic standards (e.g., portable disinfection protocols), as well as tailored health education to protect clients and workers in Nigeria's growing itinerant beauty economy.

Research Objectives

The objectives of this study include To

i. Determine the demographic characteristics of itinerant beauty workers and their clients.
ii. Identify the common beauty practices of itinerant beauty workers.
iii. Assess the extent to which itinerant workers and clients are aware of the health risks associated with patronizing itinerant beauticians.
iv. Assess the attitude of clients towards these risks.

Research Questions

The following research questions guided the study

i. What are the demographic characteristics of the itinerant workers and clients?
ii. What are the common beauty practices of itinerant beauty workers?
iii. Are clients aware of the health risks associated with patronizing itinerant beauticians?
iv. What is the attitude of clients towards these risks?

Methodology

Research Design

The study adopted a mixed approach, consisting of direct observation and survey. Both approaches are considered appropriate as the main objective of the study was to determine the practices of itinerant beauty workers and the attitudes of their clients. Thus, data collected for the study were not influenced by the researcher. Observation was used to corroborate the data obtained using a questionnaire.

Population of Study

The population of the study is indeterminate since the itinerant beauty practitioners do not specific places from which they operate and their clients, too, are not specified. The population are those workers who are operating in some cities of the Southeast and South-South States. Because the workers are always moving about and clients are indeterminate, it was not possible to have a definite population.

Sample/Sampling Technique

The sample for the study was 200. This was made up of 50 itinerant workers and 150 clients. This was selected using Multi-Stage Sampling technique. At the first stage three states, comprising Abia, Enugu and Delta, were selected from the South-South and South-East geo-political zones. Four cities- Aba, Umuahia, Enugu, and Warri were purposively selected at the second stage. The sample were recruited at markets and other sites where itinerant practitioners operated. The selection of clients assumed that every individual has at least at one point in their lifetime, patronized a beauty practitioner for one form of grooming service or another. Nevertheless, due to the difficulty in locating itinerant beauticians as they rarely operate from fixed locations, as well as the non-existence of members list, a snowball procedure was employed. The first itinerant beautician was approached while providing service to a client in the area. Thereon, referral to someone else within their social network was made, while the researcher proceeded to meet them. The inclusion criteria for clients included that clients were aged 18 and above and have used an itinerant beauty worker at least once in the last year.

Method of Data Collection

For data collection, the researcher used a structured questionnaire. The questionnaire titled "Itinerant Workers Practices and Clients Attitude Questionnaire (IWPCAQ)" had five sections. Section One was designed to elicit responses on respondents' demographic characteristics. It contained 18 items under the following subheadings: sex, age, educational level, and types of services provided and subscribed to. Section Two contained two main

items and seven and six subsections respectively. The items were in relation to the care of the equipment used by the Itinerant workers. Section Three contained four items which sought to elicit data on the frequency of the cleaning of the work environment; the time of washing brushes, towel and so on; the frequency of change towels and aprons; and the means of the disposal of wastes. Sections Two and Three were responded to only by Itinerant beauty workers. Section Four contained six items which sought information on the knowledge of clients and workers of the health risks associated with the itinerant workers practices. This section was responded to by both itinerant workers and clients. Section Five was responded to only by clients and it contained 10 items which described the attitude of clients to the practices of Itinerant Workers.

Method of Data Analysis

Data collected was analyzed using frequencies, and percentages.

Results

What are the demographic characteristics of Itinerant Workers and Clients?

The response to this question was summarized in Table 1.

Table 1. Demographic characteristics of Respondents

Demographic data	**Frequency (N=200)**	**Percentage (%)**
Sex		
Male	**74**	**37.0**
Female	**126**	**63.0**
Age (In Years)		
18-25	51	25.5
26-35	62	31.0
36-45	39	19.5
46 and above	48	24.0
Educational Levels		
Secondary Education	69	34.5
Tertiary Education	37	18.5
Elementary/No Formal Education	94	47.0
Type of service provided		
Itinerant Barbering	19	9.5
Itinerant hair styling	43	21.5
Manicure/Pedicure	62	31.0
Itinerant Makeup Artist	76	38.0

Female respondents dominated in this study. The study found that mostly respondents aged between 26 and 35 years patronized the beauty industry. Forty seven percent of the respondents had elementary or no formal education. Responses to the types of services provided showed that the most common service provided was Makeup services (38%) followed by Manicure/Pedicure (31%), Itinerant hair styling (21.5) and Itinerant barbering (9.5%).

What are the beauty practices of Itinerant beauty workers?
The responses were in relation to the care of work equipment and mode of sanitary practice. The responses have been summarized in Tables 2 and 3.

Table 2: Care of Work Equipment

Care of equipment	**Frequency (n= 50)**	**Percentage (%)**
Before use care		
Cleaning	17	34
Sterilizing	3	6
Drying	7	14
Boiling	10	20
Handheld flame	7	14
Use of methylated spirit	5	10
Nothing	1	2
After use care of equipment		
Sterilizer	4	8
Put in a box	8	16
Put in a bag	22	44
Put in a mobile container	11	22
Put in a basket	5	10

Table 2 illustrates the care of tools before use as cleaning, sterilizing, drying, boiling, hand-held flame, use of methylated spirit, including using nothing. The before-use care of equipment recorded 34%, 6%, 14%, 20%, 14%, 10% and 2% respectively. The after-use care showed 8%, 16%, 44%, 22%, and 10% for sterilizer, box, basket, bag, mobile container, and basket correspondingly.

Table 3 further present the summary of data obtained for sanitary practices of the itinerant workers.

Table 3: Mode of sanitary Practice

Sanitary practice	Frequency (n=50)	Percentage (%)
Frequency of cleaning the work environment		
After every service	4	8
Once a day	6	12
Twice a day	3	6
Thrice a wee k	4	8
Once a week	23	46
0nce a month	3	6
Not until they are dirty	7	14
Time of washing brushes /towels/aprons		
Soon after use	1	2
After the day's work	3	6
At the end of the week	7	14
Twice a week	3	6
When the equipment is dirty	26	52
No specific time	10	20
Frequency of change of towels /aprons		
Every session for each client	2	4
Two clients per cover cloth	8	16
Several clients per cover cloth	22	44
Does not follow a regular pattern	18	36
Means of waste disposal		
Waste bin	3	6
Nearby refuse dump	2	4
Gutter	18	36
Burning	11	22
Bush	9	18
Polythene bag	6	12
Any where	1	2

Results on mode of sanitary practice indicates that only 8% cleaned up work tools immediately after offering service to a client, while 14% did so only when they feel the equipment were dirty; 2% washed the towels soon after use, 52% did so only when they were dirty; only 4 % changed apron for different sessions with clients; 36% did not follow any regular pattern in this regard; the major form of waste disposal was gutter (36%).

Are itinerant beauty workers and clients aware of the health risks associated with patronizing itinerant beauty workers?
Responses to this question are summarized in Table 4.

Table 4: Awareness of health risks by both Itinerant Workers and Clients

Knowledge of Health Risks	**Frequency (N=200)**	**Percentages (%)**
Knowledge of possible infections		
HIV/AIDS	51	25.5
Fungal Scalp Infections	63	31.5
Others (Hepatitis B and C, Skin infections, etc.)	54	27.0
Do not know	32	16.0
Knowledge of ways of infection prevention		
Hand washing	39	19.5
Use of disinfectants	65	32.5
Sterilization	41	20.5
Use of gloves	33	16.5
Don't know	22	11.0
Knowledge of the importance hand washing		
Removes germs	51	25.5
Reduces germs	79	39.5
Kills germs	37	18.5
Don't know	33	16.5
Knowledge of the importance of changing and use of clean towels		
Avoid the spread of germs	131	65.5
Routine practices but with no specific reason	15	7.5
Impress clients	51	25.5
Don't know	3	1.5
Knowledge of the importance of using gloves		
To prevent both clients ' and operato rs from	103	51.5
possible infections	66	
To avoid stain ing of hands	31	33.0
Don't know		15.5

Out of the 200 clients that took part in the study, 25.5% knew that HIV/AIDS could in spread in itinerant shops. Others were fungal scalp infection (31.5%), Hepatitis, and so on. 11%, however, did not have an idea of spread of infections in itinerant beauty workshops. When the

clients were asked about the ways of prevention, majority (32.5%) chose the option of disinfectants. 39.5% knew about the importance of hand washing; 65.5% concurred with changing towels/use of clean towels to avoid the spread of germs, while 51.5% agreed to the importance of gloves to prevent the client and beautician from possible contraction of infection.

What is the attitude of clients towards these risks?
The responses to this question are summarized in Table 5

Table 5: Attitude of Clients

ATTITUDE	FREQUENCY (n=150)		PERCENTAGE (%)	
	YES	NO	YES	NO
1 believe that Itinerant beauty workers follow basic hygiene practices	66	84	44	56
The instruments used by Itinerant beauty workers are sterilized before use	56	94	37	63
The knowledge that Itinerant beauty services increase the risk of infections makes me uneasy	82	68	55	45
I feel comfortable when an itinerant beauty worker uses new or sterilized instrument.	134	16	89	11
I feel uneasy when workers reuse instruments without cleaning	125	25	83	17
I trust Itinerant workers to maintain cleanliness	46	104	31	69
I would refuse service if I saw poor hygiene during the session	105	45	70	30
I would return to an Itinerant worker who visibly follows a hygiene procedure	138	12	92	8
I would recommend an Itinerant worker who maintains adequate hygiene to friends	132	18	88	12
I find it easy to check if an itinerant worker follows hygiene procedure	104	46	69	31

The study found that 56% of the respondents believed that itinerant beauty practitioners do not follow basic hygiene practice, hence 70% said they would refuse an itinerant service if they noticed poor hygiene practice. Over 80% of the respondents had positive attitudes towards the use of new or sterilized tools, while 83% felt uneasy with the reuse of tools, particularly without cleaning. Other issues included in the study for assessing respondents` attitudes were itinerant beauty practices increasing the risk of infections (55%); possible return to an itinerant practitioner who visibly follows hygiene procedures (92%); as well as recommending an itinerant practitioner who maintains good hygiene to friends (88%), among others.

Discussion of Findings

Results from the demographic data indicates that clients who patronize itinerant beauticians in the South-south and South-East geo-political zones were within the youthful age of 18 -45 years. The female sex formed majority of clients in the beauty industry. The services rendered in the region were basically limited to hairdressing, barbing, with major presence of nail fixing, manicure and pedicure and facials. The literacy level among the workers and clients was high in the areas. Generally, clients' knowledge of infection spread at itinerant beauty premises was high. Majority had confidence in the use of disinfectants, while hand washing was perceived as basic for reducing germs. For the clients, the importance of using clean or new towels was to avoid the spread of germs, although a very small number viewed it as merely a routine practice with no specific reason, while about a quarter of the respondents believed it was to impress clients. The pre-care procedures for equipment by Itinerant beauty workers was found to be basically about cleaning and drying, while after-use care of equipment was found to be low and ranged from sterilizing, boxing, bagging, and use of mobile container, among others. The frequency of cleaning work tools was generally low among practitioners as only 8.5% cleaned up immediately after every service to a client. The quickest time to clean up tools (brushes, combs, and towels) is soon after use, however only 2.5% maintained this practice which is very poor. The incidence of the use of the same towel and apron for several clients was found to be moderately high. Such occurrence of multiple use of cover cloth negates good sanitation practices and presents a high chance of clients getting affected by disease transmission in itinerant beauty practice. Poor waste disposal practices were common among itinerant operators in the region as the use of gutters topped the list of options.

More than half of the client respondents believed that itinerant beauty practitioners do not follow basic hygiene practice, and so about three quarter of them said they would refuse an itinerant service if they noticed poor hygiene practice. Over 80% of the respondents had positive attitudes towards the use of new or sterilized tools, while 83% felt uneasy with the reuse of tools, particularly without cleaning. The result of this study collaborates the findings of Britsch, Bereswill & Heimesaatp (2024), whose study found that shaving in barbershops, particularly when reusing non-disinfected razor blades, increases the transmission risk for the human immunodeficiency virus (HIV) and hepatitis B or C viruses. Furthermore, distinct bacteria like Staphylococcus aureus, fungi (dermatophytic, and Trichophyton species) as well as ectoparasitic lice could be identified upon screening of the barbers' equipment and working places. Nevertheless, knowledge regarding and compliance in hygiene practices

varied considerably among barbers. In the same vein, the results agree with Imoro (2015) who examined sanitation management in salons in the Upper West Region of Ghana and found low literacy rates among beauticians coupled with poor sanitation practices. The study found that the spread of diseases could possibly result from multiple usage of disposables materials and cover cloths.

The findings of this study further align with Wakjira (2017) who assessed the knowledge, attitude and practice regarding the transmission and prevention of HIV/AIDS among barbers and beauty salon workers in South Ethiopia. Findings revealed that the barbering procedures in the study have the risk for HIV transmission using non-potent disinfection methods and improper handling of sharp instruments. Also, poor usage of glove, use of the same brush for each client and blade to scalp contacts in most of the sessions were observed. Additionally, in their study which assessed the knowledge of professional practices in beauty salons, Garbaccio and Cristina de Oliveira (2015) found poor adherence to the use of personal protection equipment (45%) and to methods of reprocessing equipment. The oven was the most widely used method of sterilizing, insufficient for cleaning and decontamination of material. Meanwhile, a significant portion did not use an apron/uniform or closed shoes at work.

Conclusion

In conclusion, the results of this study reinforce the need for proper hygiene among itinerant beauty practitioners. In general, it was found that adherence to proper hygiene was inadequate among itinerant beauty practitioners in their common beauty practices; nevertheless, clients were knowledgeable and generally aware of the health risks that are obtainable is such beauty places. The clients had positive attitude toward good sanitation practice and were willing to recommend itinerant operators who adhered to proper hygiene to people who may require their services.

Recommendations

In line with the findings of this paper, this following are recommended:

i. It is pertinent for clients who patronize itinerant beauty operators to own their personal needles, clippers, manicure sets, make-up kits, etc., and to take these along with them during beauty sessions to avoid the health hazards common with itinerant practice.
ii. There is need for itinerant workers to always have spare beauty work tools (such as needles, clippers, manicure sets, razor blades, hand towels) on display, which can be sold to clients who do not wish to share but prefer to buy one.
iii. Regular training workshops should be organized to educate itinerant beauty practitioners on proper hygiene practices, sterilization of instruments, and safe waste disposal methods. This will improve their awareness and compliance with professional standards.
iv. Since clients are knowledgeable and value hygiene, health promotion campaigns should encourage them to demand safe practices, such as the use of sterilized tools. This can create community-driven accountability for practitioners.

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