



# Occupational Hazards And Control Needs Of Hair Dressing Salon Workers In Rivers East Senatorial District, Rivers State

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## ABSTRACT

This study focused on occupational hazards and control needs of hair dressing salon workers in Rivers East Senatorial District, Rivers State. Descriptive cross-sectional survey design was adopted for the study. The population for this study comprised of all hair dressing salon workers in Rivers East Senatorial District, Rivers State. A sample size of 780 respondents was calculated using the Cochran formula. A multi-stage sampling technique was used to select respondents. Data was validated and collected using a self-structured questionnaire with a reliability coefficient of 0.76 and was analyzed using descriptive statistics such as frequencies, percentages, mean and standard deviation. The results showed that 474(60.8%) of the respondents had good awareness of occupational hazards associated with hair dressing salon while 306(39.2%) had poor awareness. The result showed there were poor control measures of occupational hazards ( $1.83 \pm 0.92$ ). It was concluded that hair dressing salon workers had high pattern of occupational hazards and good awareness of hazards. Therefore, they need strategies that will help them adopt control measures of these hazards. It recommended amongst others that adequate training should be given to hair dressing salon workers by the Government and relevant stakeholders in areas such as hazards in hair dressing salon to minimize and reduce the prevalence of the patterns of occupational hazards reported among hair dressing salon workers.

**Keywords:** occupational hazards, control needs, hair dressing, salon workers

## INTRODUCTION

Hairdressing salon remains one of the vibrant industries in the world of its activities being done in small scale. It is a major source of livelihood for many young people especially those with tertiary level of education and lower. A visit to hairdressing salon is usually associated with anticipations of being cared for in a relaxed environment (Green, 2021). However, few clients are conscious of the fact that the hairdressing salon can pose serious risks to those working long and uninterrupted hours. The European Agency for Safety and Health at Work (2020) has recognised that hairdressers are exposed to serious occupational health challenges and that improving working conditions must be a major priority. The cost of work related to skin diseases has been estimated to be about five billion euros a year in the European Union alone.

European Agency for Safety and Health at Work (2020) stated that the hairdressing sector employs more than one million people who work across about 400,000 hairdressing salons and receive some 350 million potential customers. Hairdressing (and barbering) services, together with beauty treatment, form the personal services sector. The hairdressing trade is dominated by small establishments. Hair salons on the average are run by self-employed hairdressers who often work on their own (without dependent employees). The share of self-employment in the sector appears to be two to ten times higher than in the

whole of the economy. In some developed countries, mobile hairdressers represent up to 23% of the sector's workforce. However, hairdressing is a predominantly female profession, with over 80 % women workers. Many of them work part- time and stay in the sector for only short periods of time (Weber et al., 2011). The sector is also characterised by a young workforce. About 80 % of recruits are aged under 26 and 56 % are under 19.

A hairdresser is a person whose occupation is to cut or style hair in order to change or maintain a person's physical look. Hairdressers are group of workers whose working ability and health condition may be affected by specific work-related activities. A daily task analysis showed that experienced hairdressers spend on average 29% of their time cutting, 8% washing hair, 17% dyeing and 10% blow-drying. These activities required frequent sagittal or lateral bending and twisting of the back (e.g. washing hair at the sink), static postures and long-standing periods. Repetitive tasks have been observed during all client-related activities (Kozak et al., 2019). Results from kinematic posture analysis revealed that hairdressers spend 9-13% of their total working time with arms elevated over 60°. Working with elevated arms above shoulder level is considered a major risk factor for clinically verified shoulder disorders or persistent severe pain (Chen et al., 2014).

Hair dressing salon workers are particularly observed to be prone to occupational hazards which cause many health challenges like noise from generator and engines, poor lightening condition, falls due to slippery floor, exposure to fumes, exposure to solvent and problems at work due to frequent exposure to such health hazards. They are also faced with musculoskeletal disorders such as carpal tunnel syndrome, tendonitis, muscle/ tendon strain, ligament sprain, tension neck syndrome, thoracic outlet compression, rotator cuff tendonitis, picondylitis, radial tunnel syndrome, digital neuritis etc. These disorders affect mostly the Dints, ligaments, muscles, nerves, tendons, and structures that support limbs, neck and back. Other hazards they faced includes biological hazards such as poor personal hygiene which can emanate to fungi or viral infections etc (Kozak et al., 2019).

A hair dresser work involves a constant use of various positions that lasts for long hours; this sometimes leads to structural health challenges, lifelong disability if proper precautions are not taken. Determining the prevalence of occupational hazards among hair dressing salon workers is pertinent since many of them are self-employed with little education, and less knowledge on preventing risk factors that may lead to this problems amongst them adopting coping strategies. The hair dressing business belongs to the informal sectors. Some live in slums and rural areas and lack basic health and welfare services including social protection, they also work in an unhealthy and unsafe work environment and are usually faced with great demand and pressures from customers thereby working for long hours without considering the outcome and some to extent get infected. This makes them to be vulnerable to stress, diseases, psychological challenges and poor health (Chen et al., 2014).

Poor identification and prevention of risk factors have been observed among hair dressing salon workers especially amongst the road side self-employed in Nigeria. This prompts the question as to what are the occupational hazards and control needs of hairdressers, since this occupation has been identified to result in some health challenges. The commonest risk factors among hair dressing salon workers are the constant use of chemicals, machines, sharp objects such as blades and needles. Therefore, it becomes necessary in order to investigate the problems faced by hair dressing salon workers in Rivers East Senatorial District. However, the occupational hazards and control needs among hair dressing salon workers in Rivers East Senatorial District is lacking in most researches, this study intends to fill that gap.

#### **Aim of the Study**

The aim of this study was to determine the occupational hazards and control needs of hair dressing salon workers in Rivers East Senatorial District, Rivers State.

#### **RESEARCH METHODS**

The study was carried out in Rivers East Senatorial District of Rivers State, Nigeria. The design for this study was a cross-sectional descriptive survey design. The population for this study comprised of salon hair dressers in Rivers East Senatorial District, Rivers State. A sample Size of 800 respondents was

calculated using the Cochran formula. A simple random sampling technique was used to select two wards from each Local Government Areas. Fifty (50) salon hair dressers were selected from 2 wards each using non proportionate sampling techniques. This was a total of 100 salon hair dressers from each Local Government Area. The respondents were selected through purposive sampling since salon hair dressers have no functional union as at the time of this study. The instrument for data collection was a self-structured questionnaire titled “Questionnaire on hazards and control needs of hair dressing salon workers in Rivers East Senatorial District, (QHCNHIDS WRES D) which was used to obtain information from the respondent comprised of relevant items that elicited information on the degree to which the respondents agreed or disagreed with the items. The instrument was self-administered to 30 salon hair dressers in South East Senatorial District which share similar characteristics with the area of study. The same questionnaires were administered after two weeks interval on the same respondents. The two results obtained were correlated using the Pearson Product Moment Correlation (PPMC) and reliability efficient of 0.80 was obtained for the study. Hence, the instrument was therefore considered reliable. The questionnaire titled hazards and control needs of hair dressing salon workers in Rivers East Senatorial District was self-administered by the researcher with the help of 6 trained research assistants. Instruments were collected at the spot after filling for analysis. Data collected were coded and analysed using the descriptive statistics of frequency and percentages (%), mean, standard deviation .

## RESULTS

**Table 4.1: Awareness of occupational hazards**

S/N	Type of occupational hazards	Yes Freq (%)	No Freq (%)
<b>Physical Hazards</b>			
1	Can the use of electrical appliance cause fire	409(52.4)	371(47.6)
2	The use of candle can result to burns	610(78.2)	170(21.8)
3	Picking items from height can lead to falling	606(77.7)	174(22.3)
4	Explosion can occur through the dryer	607(77.8)	173(22.2)
	<b>Total</b>	<b>558(71.5)</b>	<b>222(28.5)</b>
<b>Biology Hazards</b>			
5	You may get infection from customer	532(68.2)	248(31.8)
6	Non use of hand gloves can lead to infection	400(51.3)	380(48.7)
7	Dirty floor can result to pathogens	430(55.1)	350(44.9)
8	You can get respiratory infect through surface of utensil	393(50.4)	387(49.6)
	<b>Total</b>	<b>439(56.2)</b>	<b>341(43.8)</b>
<b>Chemical Hazards</b>			
9	Detergents can lead to corrosion	457(58.6)	323(41.4)
10	Poor handling of shampoo can cause skin burn	399(51.2)	381(48.8)
11	The inhalations of the chemical can lead to lung cancer	269(34.2)	513(65.8)
12	Chemical can explode and affect the eyes	427(54.7)	353(45.3)
	<b>Total</b>	<b>388(49.8)</b>	<b>392(50.2)</b>
<b>Ergonomic Hazards</b>			
13	Standing and washing can lead to back pain	421(54.0)	359(46.0)
14	Poor sitting can lead to waist pain	511(65.5)	269(34.5)
15	Muscular skeletal pain may occur because of work load	635(81.4)	145(18.6)
16	Multiple tasking like plaiting, setting and washing results to body disorderliness	494(63.3)	286(36.7)
	<b>Total</b>	<b>515(66.0)</b>	<b>265(34.0)</b>
<b>Psychological Hazards</b>			
17	Abuse from customers can lead to quarrel	620(79.5)	160(20.5)
18	Poor attendance of customers on daily basis can lead to stress	502(64.4)	278(35.6)
19	Too many customers leads to over working	460(59.0)	320(41.0)
20	Overcrowding of salon may lead to abuse	301(38.6)	479(61.4)
	<b>Total</b>	<b>471(60.4)</b>	<b>309(39.6)</b>
	<b>Overall total</b>	<b>474(60.8)</b>	<b>306(39.2)</b>

Decision: > 50 % Good: <50% Poor

Table 4.1 shows the awareness of occupational hazards associated with hair dressing salon in Rivers East Senatorial District, Rivers State. The results showed that 474(60.8%) of the respondents had good awareness of occupational hazards associated with hair dressing salon while 306(39.2%) had poor awareness.

**Table 4.2: Control measures of occupational hazards**

S/N	Items	Mean	Standard deviation	Decision
1	I use face shields	1.41	0.59	Poor
2	I use nose masks	1.64	0.63	Poor
3	Is there eye goggle	1.38	0.74	Poor
4	Is there ear muff	2.24	1.03	Poor
5	I use apron	2.00	0.92	Poor
6	I use hand glove	2.50	1.36	Good
7	I use canvas	1.57	0.84	Poor
8	I go for vaccination	1.63	0.61	Poor
9	I go for regular medical examination	2.17	0.86	Poor
10	I clean the shop	1.80	0.58	Poor
11	I carry out safe and proper disposal of sharp objects such as needles, blades etc	2.51	0.93	Good
12	I sanitize after using equipment	1.80	0.57	Poor
	<b>Grand total</b>	<b>1.83</b>	<b>0.77</b>	<b>Poor</b>

Decision: criterion mean is 2.5. >2.5: Good control measures; <2.5: Poor control measures

Table 4.2 shows the control measures of occupational hazards among hair dressing salon workers in Rivers East Senatorial District, Rivers State. The result showed that the grand mean = 1.83 is lesser than the criterion mean of 2.5 indicating poor control measures of occupational hazards. However, control measures of occupational hazards was found more on the item 'I use glove' with a mean value of 2.50±0.92 and on the item 'I carry out safe and proper disposal of sharp objects such as needles, blades etc' with a mean value of 2.51±0.93.

## DISCUSSION

The finding showed that more than half of the respondents had varying pattern of occupational hazards ranging from musculoskeletal disorders, infectious diseases and fungal infection etc. By implication, this shows that hair dressing salon workers suffer from one occupational hazard to the other due to their occupation. The finding of this study is in keeping with the studies of Kezic et al. (2022), Macan et al. (2022), Aavang et al. (2022). These studies discovered that salon hair dressers are exposed to various occupational hazards especially respiratory diseases. The finding of this study is also similar to the studies of Mishra and Sarkar (2021), Kozak et al. (2019) and Nguyen et al. (2022) whose studies reported that salon hair dressers are prone to lung problems and other physical injuries. This might be so because salon hair dressers activities or job exposes them to conditions that can lead to occupational hazards very easily. For example most of their job performance demands the use of sharp objects such as blades, razors, needle etc.

The finding of the study is also in keeping with the studies of Omokhodion et al. (2019) and Bradshaw et al. (2011). These studies reported that salon hair dressers are exposed to more physical injuries and infections unlike the medical and healthcare workers. However, some of these studies also reported that most of them suffer from musculoskeletal disorders such as neck, back, wrist pains due to heavy workload. Hence, the similarities reported between these studies might be attributed to the fact that they all face the same method of work condition and all uses the same instrument and equipment in course of their occupation. However, no previous studies reported that salon hair dressers do not face one pattern of occupational hazard or the other. Therefore, by implication, it means that the salon hair

dressers industry needs more attention from agencies in order to increase the level of knowledge of occupational hazard and control measures.

The finding of the study revealed that majority of the respondents had good awareness of occupational diseases associated with hair dressing salon. This shows that hair dressing salon workers have the chances of prevention of occupational hazards in the work place. The finding of this study corroborates with the study of Nguyen et al. (2022) and Abia et al. (2016) whose study reported that there were good awareness of occupational hazard among salon hair dressing workers. The finding of this study is also consistent with the findings of Moda and King (2019), Kozak et al. (2019) and Bradshaw et al. (2011). These studies discovered that majority of hair dressing salon workers had good awareness of occupational hazard. This shows that if they translate this knowledge and awareness into action, they will do well in adopting preventive measures. However, the similarities reported in these studies could be attributed to the fact that hair dressing salon workers had had experiences related to their occupational hazards.

However, the finding of this study deviates from the studies of Nixon et al. (2006) and Khalaf et al. (2020) whose studies reported that respondents had poor awareness on occupational hazard. This sounds surprising as hair dressing salon workers did not have enough awareness to the problem they face each day. This also means that these hair dressing salon workers must have contributed to the spread of infections to their customers due to their poor knowledge. However, the differences reported between these studies could be attributed to the fact that either these salon workers are just beginning the profession or they have poor educational background which has not exposed them to the spread of communicable diseases. However, individual differences and training can play important roles. Also geographical location and cultural settings may contribute immensely.

The finding of the study revealed that there was poor control measures of occupational hazards among respondents except for those who indicated that they use glove and carry out safe and proper disposal of sharp objects such as needles, blades etc'. This shows that despite the good awareness of occupational hazards reported among the respondents, there was poor adoption of preventive measures. However, the finding of this study could be similar to the study of Khalaf et al. (2020), Abia et al. (2016) and Nixon et al. (2006) whose studies reported poor control measures of occupational hazards among hair dressing salon workers. This is not surprising as people can have good knowledge of a particular problem but may not be willing to provide solution to that problem. However, an important factor to this poor control measure might be attributed to behavioral issues and poor policies adopted in various study locations towards the prevention of occupational hazards among workers.

However, the studies of Vanderde and Belgium (2019) and Roelfs et al. (2008) are not in line with the finding of the present study. They discovered that hair dressing salon workers had good control measures of occupational hazards. The finding of Sa and Ma (2019) and Sedhain and Adhikari (2012) is not also in keeping with the finding of the present study as they reported that hair dressing salon workers had good control measures of occupational hazards. This result is not surprising because it is the duty of workers to protect themselves from occupational hazards once they have all necessary facilities to do so. However, the reason why these studies are different from the present study might be attributed to the level of education and type of training gotten before the start of the job.

## **CONCLUSION**

Based on the findings of the study, it was concluded that hair dressing salon workers had high pattern of occupational hazards and good awareness of hazards. Therefore, they need strategies that will help them adopt control measures of these hazards.

## **RECOMMENDATIONS**

In view of the findings of this study, the following recommendations were made:

1. Education, training and prevention are the best methods for managing the adverse health effects that are common among different occupations. Therefore, adequate training should be given to

hair dressing salon workers by the Government and relevant stakeholders in areas such as hazards in hair dressing salon to minimize and reduce the prevalence of the patterns of occupational hazards reported among hair dressing salon workers.

2. Ministries in charge of labour and productivity from time to time should go for inspection of salon's workshop to ascertain work related hazards prevalent and the method of controlling them to prevent risk factors that contribute to work hazards among hair dressing salon workers.
3. The government, ministries of health/environment and other relevant agencies should embark on health education and awareness campaign on the pattern of occupational hazards reported among hair dressing salon workers to improve control measures and enhance safety precautions.
4. Through the mass media, the Government and stake holders should organise a fresher training for hair dressing salon workers to update their knowledge especially those with informal education and those with first school leaving certificate (FLSC) in order to reduce the determinants of work related hazards.
5. Technical Colleges, Polytechnics and Universities where hair dressing programmes are organized should be properly equipped with required personnel (man power) and equipment in order to reduce the determinants of work related problems.

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