IMPACT OF SAFETY EDUCATION PROGRAMME ON HAIRDRESSERS AT-RISK HEALTH BEHAVIOURS IN WARRI SOUTH LOCAL GOVERNMENT AREA OF DELTA STATE

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Abstract
The main thrust of this study was to investigate the impact of safety education programme on the at- risk health behaviour of hairdressers in Warri South Local Government Area of Delta State. A quasi-experimental method was adopted. A sample size of 114 hair dressers were selected. A questionnaire was used as instrument for data collection. Frequency, mean and t-test statistics were used for data analysis. Findings from the study revealed that the intervention programme yielded positive impact (2.34 > 2.00) on the health and safety practice of hair dressers; the t-test revealed significant difference between the pretest and post test score of hair dressers' health and safety practice (P < 2.80). Health and safety education programme was recommended for hair dressers and similar small scale industries.

Keywords: *Intervention, At- risk health behavior, Health and Safety, Hairdresser*

Introduction
Human beings by nature always look forward to looking beautiful or sustaining their beauty. Parts of the body which human being often look forward to maintaining in order to look beautiful are hair, face, skin and clothes. The desire to promote and sustain beauty makes many, particularly females to partronize the services of individuals who are trained and skillful in the beautification job. Among this group of trained personnel who render services in this aspect of human need are the hair dressers who work in hair dressing salons. Hairdressing work is a job that involves a group of workers that work in small scale enterprises with little or no health supervision in the workplace. It is an occupation that deals with the beautification of people. They are one group of workers who forms a part of the informal economy in which work exposure is unregulated and working conditions are below standards.

Hair dressing job is an occupation occupied by semi skilled labourers with little or no safety knowledge particularly on the hazards associated with their job. Hair dressers utilize a variety of hair products which contain chemicals that can predispose them to respiratory diseases. A variety of products such as hair dyes, bleaching solutions, shampoos, toning agents, conditioners and hair sprays are used by hairdressers when rendering services. These products contain potentially harmful chemicals namely: resorcinol, aromatic amines, volatile solvents, diaminotoluene, formaldehyde, ammonia, ethanol and thioglycolic acid which

may cause bronchoconstriction and airway obstruction (Onowhakpor, Aigbovorhiuwa &, Okojie, 2013; Moscato & Galdi, 2006; Moscato, Pignatti & Yacoub,20 there are various hazards associated with the hair dressing job.

These hazards range from physical and chemical hazards to psychosocial hazards. The hairdressers are particularly subjected to various occupational health risks. Problems such as poor posture, mechanical load on the joints, prolonged standing, longer working hours, missed meals, not taking breaks during working, as well as being subjected to physical factors such as noise and higher temperatures. These and more are important occupational health risks for these people (Mussi, Gouveia, 2008; Hollund, Moen, Lygre, Florvaag, & Omenaas, 2001).

Omokhodion, Balogun and Ola-Olorun, (2013) added that the hairdressers' work environment has predominantly mechanical and chemical hazards. They admitted that hair dressers endure long working hours and poor earnings in a physically demanding job, which are all characteristics of small scale enterprises. The work conditions in this sector continue to pose challenges to occupational health authorities in developing countries.

McQuerrey (2018) concurred that hairdressers use a variety of chemical solvents in their daily work. Hair colouring solutions, permanent wave solutions, straightening creams, peroxide and bleaching agents used by hair dressers can all be dangerous if inhaled or ingested. Other products can create chemical burns if they come in contact with skin and are not immediately washed off. *McQuerrey* (2018) stressed on chemical hazards that hair dressers are exposed to in their job; stated that eyes can also be at risk for chemical splashes. As such, protective clothing, gloves, face masks and even protective eye-wear should be considered to minimize exposure.

Omokhodion, Balogun & Ola-Olorun (2013) while lamenting on the hazards of hairdressing work, confirmed that hairdressers complained of long working hours, poor earnings and prolonged standing. They identified various occupational hazards in the hair dressing job in their order of hierarchy included in these hazards are needles used for fixing hair attachments, hair relaxing creams, blades, handling hot water, and electrical equipment. Types of accidents reported by Omokhodion, Balogun & Ola-Olorun, (2013) were needle pricks, cuts, accidents involving hot water and electric shock. Joint pains and low back pain were the most frequently reported illnesses among hairdressers and hand dermatitis was reported by 5% of hairdressers (Omokhodion, Balogun & Ola-Olorun, 2013).

A high number of the young people were engaged and exposed to various hazards in hairdressing. These group of workers lack much health and safety knowledge as well as securities (hazard allowances and health insurance) enjoyed by other workers in the formal setting, hence they bear the full burden of the negative effects of work on their health as work has the capability on impacting

on workers' health. Thus, this emphasizes the need for a health and safety intervention programme for this group of workers as a way of assessing and promoting their health status in the community where they work. This study therefore seeks to identify the nature of a health and safety intervention programme in relation to health and safety hazards of hair dressers in Warri South Local Government Area (LGA), Delta State. Oladipo and Fasasi (2011) Omobude-Idiado, Irimonre and Oho Asikhia, (2013) and Odibo (2018) have successfully carried out this type of intervention programme for sawmill workers and welders respectively.

Methodology

This study is an intervention study which adopted the quasi-experimental design to assess the impact of health and safety intervention programme on hairdressers' hair and safety practices in Warri South Local Government Area, Delta State. This design was considered appropriate as the researcher went to the field and collected qualitative and quantitative data from the respondents twice, firstly prior to the intervention and the secondly after the intervention and compared the result obtained from the two sets of data. This was done within three (3) months intervals. This design is in line with literature (Hatami, 2002; Ogbe, 2010; Oladipo and Fasasi, 2013; Ugwu, 2013; Olumide *et al, 2016*).

The population of the study comprised all one thousand and seventy-six (1,076) hair dressers in Warri South Local Government Area of Delta State. The sample size for the study consisted of one hundred and fourteen (114) hair dressers randomly selected from six (6) wards in Warri South Local Government Area of Delta State. The sampling techniques used were purposive sampling and simple random sampling methods. The purposive sampling method was used to select only hair dressers (qualified and apprenticed) who are currently in practice as at the time of the study. The simple random sampling on the other hand was used to select nineteen hair dressing salon in each of the six wards selected from the total twelve wards in the study area. This was done through the balloting method to avoid bias and misrepresentation.

The research instrument used in the study for data collection was a structured questionnaire. The validity of the instrument was done through content validity method using stated objectives and research questions. The reliability of the study was established using split half method with Pearson's Product Moment Correlation Coefficient. The reliability of the instrument was 0.83.

Data were collected in two sets (pre and post tests). The pre test was done to get pre-knowledge level and safety practice of the hair dressers in their profession prior to the intervention programme while the post test data were collected after a twelve weeks' intervention programme (health / safety knowledge and practice programme). The pretest and post tests were done for all the participants. Thus, it was not necessary to create a control group as the

essence was to determine if there was an impact or not. The structured questionnaire was used to collect data on the pre knowledge and safety practice of the hair dressers. The health and safety intervention programme was carried out on occupational health hazards of hair dressing, health and safety needs of workers, implications of exposing oneself to hazards, risks and prevention of exposure (health and safety measures) and accidents in hair dressing. The twelve weeks' intervention programme was organized for the entire sampled hairdressers (114 hairdressers) after the pretest. After the health and safety intervention programme, a post test was administered from which data were collected, and analyzed with the used of descriptive statistics (frequency, mean, and percentage) and t-test.

Results

Table 1: Presentation of respondents personal data

Variables	Option	Frequency	Percentage
Gender	Female	108	94.7%
	Male	6	5.3%
Working Experience:	1-3months	18	15.8%
	4-6months	32	28.1%%
	6months – 1years	34	29.8%
	2years and above	30	26.3%
Educational Background:	FSLC	32	28.1%
	SSCE	46	40.4%
	OND/NCE	16	14%
	HND/B.Sc.	13	12.3%
	No schooling at all	6	5.3%

From the data in Table 1 above, it was found that out of the 114 respondents that participated in the study, 108 (94.7%) of the respondents were females while 6 (5.3%) were male hair dressers. 9 (15.8%) of them had within 1-3 months' working experienced, 32 (28.1%) had 4-6 months experience, 34 (29.8%) had 6 months to one year working experience while 30 (26.3%) had 2 years and above working experience in hairdressing. With regard to educational background, it was revealed that 32 (28.1%) of the total participants had First School Leaving Certificate (FSLC), 46 (40.4%) had SSCE/WASC, 16 had OND/NCE, 14 (12.3%) had HND/B.Sc while 6 (5.3%) did not have any certificate as at the times of the study.

Research Questions One

What is the level of safety practices to the reduction of at-risk health behaviour among hairdressers in Warri South Local Government Area of Delta State?

Table 2: The level of safety practices and the reduction of at-risk health behaviours among hairdressers

	Safety practices of hairdressers	Pretest Frequency			Post test Frequency		
		Often	**Seldom**	**Never**	**Often**	**Seldom**	**Never**
	How often do you observe the following health and safety measures in your work?						
1.	Leaving clipped hair to lie on the floor, as they can cause slip and falls	34	67	13	2	42	70
2.	Wearing hand groves whenever I am making customers' hair in my Salon	12	45	45	73	31	10
3.	Siting on a high stool when making customers' hair to avoid long standing problem.	13	35	66	72	25	17
4.	Observing break when i am working whether there are customers or not	38	69	7	67	34	13
5.	Discussing my relationship issues with customers or friend's when I am at work	34	34	46	63	26	25
6.	Wearing rubber-soled shoes to reduce the risk of injury, and reacting immediately to spills or hair on the floor expedites the clean up	4	24	86	56	54	4
7.	Drying floor whenever I observe wetness on the floor.	34	35	45	62	28	24
8.	Opening my windows to avoid heat and poor lightening problems.	34	54	26	82	14	18
9.	Washing hands with sterilizers after making any customer's hair.	2	43	69	63	23	28
10.	Sterilizing my working tools after the day's work.	13	56	45	68	34	12
	TOTAL	**218**	**462**	**448**	**608**	**313**	**221**
	Mean	**1.78**			**2.34**		
	Decision	**Low**			**High**		

Mean Bench Mark = 2.00 [(3+2+1) ÷3 = 2.00]

From the analysis in Table 2 above, it was found that the mean score (1.78) of the pre test score of the hair dressers on their health and safety practice was less than the mean bench mark (2.00). This indicated low level of safety practice. But on

the post test score, the mean score (2.34) was found higher than the mean bench mark (2.00). This indicated high level of safety practice after the intervention programme. Thus, the intervention programme had positive impact.

Research Question Two: What is the impact of safety intervention programme on the health and safety practices of hair dressers in Warri South Area of Delta State?

Table 3: The impact of safety practices and the reduction of at-risk health behaviours on the safety practices of hair dressers

Response	Pre-test	Post test (Intervention)
Often	22	61
Seldom	46	31
Never	46	22
Mean value	**1.79**	**2.34**
Impact		POSITIVE

From the analysis in the Table 3 above, it was found that the mean value (2.34) of the post test (intervention) was higher than the mean bench mark (2.00). This indicated positive impact. Means that the health and satey intervention programme has positive impact on the health and safety practices of hair dressers in Warri South Area of Delta State

Hypothesis

Ho1: There is no significant difference on the pretest and post scores of hairdressers exposed to safety education programme in Warri South Local Government Area of Delta State.

Table 4: t-test analysis of pretest and post test scores of hairdressers on the health and safety education programme

Score	No.	Mean	SD	t-cal	t.crit	Sig	Df	Decision
Post test score	114	1.12	10.57	2.80	1..98	0.05	112	Rejected
Pretest score	114	4.98	10.21					

From the t-test analysis in the Table 4 above, it was found that in the t-calculated value (2.80) was greater than the t-critical value (1.98) under degree of freedom (df) 112 at 0.05 significance level. Thus, the null hypothesis stated was rejected. This indicates that there is significant difference on the significant difference on the pretest and post scores of hairdressers exposed to safety intervention programme in Warri South Local Government Area of Delta State. This shows that the health and safety intervention programme has significant impact on the health and safety practice of the hairdressers.

Discussion of findings

The study focused on the impact of safety education programme on the hair dressers' at-risk health and safety behaviours in Warri South Local Government area of Delta State. 114 respondents who were currently practising in hair dressing job participated in the study. From the total sample in the study, it was revealed that almost all the participants were female (94.4%) and had at least 3-6mounths (28.1%) experienced in hair dressing. Majority of the participants in the study were not highly educated; they were mainly SSCE holders (40.4%). This clarified the assertion of many scholars that most hairdressers are workers with low educational background. This is in line with Onowhakpor, Aigbovorhiuwa and Okojie (2013) who showed that majority of the respondents in their study were mainly secondary school leavers.

Finding from the study showed that the level of safety practice of hair dressers in Warri South Local Government Areas of Delta State prior to an intervention programme was low. This indicated the reason most hair dressers were exposed to common ill-health and injuries present in their job. This result supported the findings of Omokhodion, Balogun & Ola-Olorun (2013) which stated that hairdressers complained of long working hours, poor earnings and prolonged standing with to their work conditions. They further found that due to poor level of safety practice, the hair dressers are continually exposed to various occupational hazards which among others include needles used for fixing hair attachments, hair relaxing creams, blades, handling hot water, and electrical equipment resulting in needle pricks, cuts, accidents involving hot water and electric shock, joint pains and low back pain were the most frequently reported illnesses among hairdressers. Hand dermatitis was reported by 5% of hairdressers in Omokhodion, Balogun & Ola-Olorun (2013) study.

The result of this study further indicated that health and safety intervention programme have positive impact of the health and safety practices of hair dressers in Warri South Local Government Area of Delta State. The result showed that the hairdressers' health and safety practice post test score in the study was higher and more positive than the pre test score after being exposed to the intervention programme. Thus, this showed that the intervention programme has significant positive impact on the health and safety practice of the hair dressers. This result corroborated the finding of Omotosho *et al* (2012), and Opaluwa and Opaluwa (2015) who found in their study titled occupational hazard awareness and safety practices among cement factory workers at Obajana, Kogi state, Nigeria that the cement factory workers safety practice was enhanced significantly due to their awareness and knowledge of occupational hazards present in their job. The result of the study also supports the findings of Faremi *et al* (2014) who showed that, a majority of the respondents in their study had an awareness of occupational hazards as a result of education and training given to the workers.

Implication for Safety Practice

The result of the study showed that safety education promoted the hair dressers' health and safety practice and reduces their direct exposure to hazards in their job. The implication of the above is that ill-health and injuries rate will continue to be reduced when safety is practised but will increase due to lack of knowledge of health and safety education among the workers. Therefore, knowledge in terms of this kind of intervention is the key to practice Thus, health and safety education should be a continuous process for hair dressers and others such as small and medium scale industries as it serve as an antidote to illness and injury occurrence in their job practice.

Principles of safety practices as seen in the oil gas multi-national corporations should be adapted in the small scale industries like the hair dressing outfits. Safety education should thus be a necessity in these outfits.

Conclusion

Safety practices are key to prevention of illness and accidents which lead to injuries among workers particularly in the hair dressing saloons. This study has been able to establish that health and safety intervention programme can significantly reduce the occurrence of occupational illness and accidents to the barest minimum. From findings of the study, it was concluded that knowledge of health and safety enhances safety practices of workers in the hair dressing saloon and as well reduces their at-risk health behaviours and thus illness and injury rate. Therefore, the need for continuous enhancement of the workers' health and safety knowledge to discourage at-risk health behaviour through health and safety intervention programme should be a necessity.

Based on the findings and conclusion from this study, the following recommendations were made.

i. Safety instruction should be introduced into the hair dressing occupation and other similar small scale industries. This, the local government areas, state and national agencies must ensure that this is carried to the grassroots.
ii. Safety educators should therefore endeavour to be on ground to provide health and safety knowledge to hair dressers and other small scale industries to enhance a national healthy workforce.
iii. For the Nigeria economy to grow, the workforce has to be kept healthy and safe, thus, this type of intervention should be encouraged in all facets.
iv. There should be continuous organized health and safety education programmes for hair dressers on hazards and need for regular safety practices enforcement.

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