

Knowledge of Occupational Diseases and Practice of Preventive Measures among Roadside Workers in Uyo Metropolis, Akwa Ibom State – Nigeria

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Abstract

The study was conducted to determine the level of knowledge of occupational diseases and practice of preventive measures among roadside workers in Uyo Metropolis, Akwa Ibom State. The purpose of the study was to determine the level of knowledge of occupational diseases and the practice of preventive measures among roadside workers in Uyo Metropolis. Two research questions were formulated for the study while one research hypothesis was tested. A cross-sectional survey design was adopted using a purposive sampling technique where 200 respondents were drawn for the study from four major roads in Akwa Ibom State. A fifteenth item questionnaire (KODPPMRW) was the only instrument used for data collection. Frequency and percentage was used to answer the research questions while Chi Square was used to test the hypothesis at .05 level of significance. The result of the study revealed that roadside workers have high knowledge about the diseases associated with their work which significantly influences the practice of preventive measures. Recommendation was on health education of roadside workers in Akwa Ibom State to stimulate their interest on the need for regular practice of preventive measures while at work.

Keywords: Knowledge, Occupational, Diseases, Preventive, Practices

Introduction

Work is considered a basic and central part of one's life. Most adults spend a significant portion of their lives at work with their jobs often bringing meaning and structure to their lives and often perceived work as part of their identity (Akinsola, 2006). Work has its positive health-promoting effects, as the financial dividend, provides the worker with the basic necessities of life (Awodele, Popoola, Ogbudu, Akinyede, Coker, Akintonwa, 2014). . In spite of this, condition at work and in the working environment of many people still involve a distinct and even severe hazard to health that reduces the well-being, working capacity and even the lifespan of working individuals. Although Nigeria is potentially a great nation, the vast majority, 70 per cent of her citizens are living below poverty line (Okafor, 2013). Many people find employment in an informal setting to boost the economy and secure a successful path way out of poverty (Berry, 2009). Consequently, citizens may engage in some economic activities not for the joy of the occupation but out of necessity to earn out a living (Idyorough & Ishor, 2014). Every occupation is associated with occupational risks to the workers which endangers life and wellbeing, such that adequate preventive measures is not only a sound economic policy, but it is a basic human right to reduce these risks and associated diseases.

An occupational disease is a disorder that is caused by the work or working condition. This means that the disease must have developed due to exposures in workplace. This disease may be acute or chronic in nature and can be essentially preventable. Reduction of vulnerability depends on recognition of these risks, the diseases associated with each type of work and practice of adequate and proper preventive measures. Gupta and Ghai (2007) opined that the conditions in which people work can influence their health positively or negatively. According to the author, work related illnesses are serious problems in industrial and mining work and may also occur in offices, schools and other workplaces settings.

A substantial part of the general morbidity of the population is related to work and working conditions (World Health Organization - WHO, 2009). This assertion, though frightening is not surprising as workers contribute greatly to the economic and social value of contemporary society (WHO, 2009). Globalization has been associated with extensive changes in the structure of labour markets worldwide with corresponding rise in precarious and unprotected work in formal and informal setting both in industrialized and developing countries (Belin, Zamparutti, Tull and Hernandez, 2011).

Roadside workers constitute an important working group in the informal setting in the cities especially urban townships. The need for their services cannot be over-emphasized to all groups of people including the wealthy ones in the society, while they also share in the global burden of occupational diseases and injuries. The roadside workers are examples of workers whose working conditions create particular vulnerabilities to health risk in the society (Berry 2009). This is because they are exposed to adverse conditions for longer periods on their daily working experience which results in various diseases altering their well-being.

Roadside workers are made up of the street vendors of various items such as newspapers, food, clothes, shoes, recharge cards and any other business such as vulcanizing, computer services, photocopying, typing, photography and shoes mending carried out on the side of roads and streets. Some of these workers have shops and kiosks close to the main road while, some stay under the trees and umbrellas at strategic positions to market their products and render emergency services to clients. These workers spend the whole day on the roadsides selling various items and doing other businesses.

Roadside workers are common in most cities all over the world (Markey, 2012). In every part of the world this work is carried out to earn a living especially in places where economic conditions are unfavourable. The work of this group of people evolve as a result of unemployment, poverty and lack of skill acquisition in order to alleviate poverty and earn a living which makes them to work at various strategic position in the urban city that easily enable them to make sales or render services to different customers. Roadside workers save time and relieve stress of many clients going to the regular market and other business centers to purchases goods, specifically during emergencies. People of varying ages and educational qualifications are involved in this type of work which has become a viable survival alternative in many homes especially in developing countries (Ekeanyanwu, 2012). Despite this, the working conditions of roadside workers are generally very poor and most of all, many cities have prohibited roadside work of which they are often harassed and manhandled by civil authorities or made to give bribes to continue their businesses (Okafor, 2013). This means that psychologically; they are not happy and satisfied with their work, and will gladly abandon it for more stable and comfortable employment or more sustainable business.

Occupational health guarantees total health and safety of the worker, physically, mentally and socially. The well-being and quality of life of working people are crucial prerequisites for productivity and are of utmost importance for overall socio-economic and sustainable development of the society (Tawaih, 2011). There is, however, a reciprocal and interactive relationship between the workers and the work environment. The knowledge of these interactions between work and health is fundamental in understanding and practicing occupational health and safety. Unfortunately, some workers assume little responsibility for the protection of their health and safety. In fact some workers do not know that they have moral and legal responsibilities to protect themselves from the inherent health hazards associated with their occupations.

Ahmed and Newson (2010), opined that workers are faced with multitude work related illnesses/diseases and injuries as a result of the health hazards and lack of attention given to health and preventive measures. Physically, they face trauma from assault by civil authorities and accident from vehicles resulting in wounds, mentally they are exposed to psychological disorders resulting in depression, mental instability, aggressiveness and irritability, and socially, these workers feel ashamed and disappointed among their equals to be occupied with the type of work done to earn a living while there is no alternative. These workers also face various diseases such as frequent malaria from mosquito bites, scabies, allergic reaction from various insect and reptiles bites due to work sites nearby bushes, and gutters. (Ekeanyanwu, 2012). Some of these diseases manifest immediately while others are delayed, and some may not be reversible.

Emmanuel, Oluwayomi, Ogunrinola and Fadayomi (2012), noted that a change in mental state is often associated with roadside work which may lead to other diseases such as raised blood pressure and sleep pattern disturbance, while other illnesses include gastro-intestinal disturbances, back pain, tension, headache and palpitation. Respiratory disorders such as asthma due to inhaled combustive flame and fumes from vehicles and other air pollution sources are also common health problems experienced by roadside traders. In addition, the roadside workers experience harsh weather (hot and cold) for longer periods during their work, and are also exposed to assaults, accidental injuries specifically accidents from auto crashes which may result in death (Belin, Zamparutti, Tull, & Hernadez, 2011). Other numerous health problems faced by the roadside workers include, common cold, cough, pneumonia as a result of frequent exposure to dust, exhaust fumes from vehicles and air pollution from nearby waste-dumping sites, noise induced hearing loss from horns of big trucks and other frequent and regular moving vehicles.

Maylow (2011) opined that people working on the roadside such as the police officers are exposed to assault, accidents from auto crash which may result in loss of life. Roadside workers are also exposed to ergonomic problems such as musculo-skeletal disorders such as low back pain, waist pain as a result of carrying heavy loads and walking with it on the road to sell to different customers. In a study of health challenges of female hawkers in Lafia Metropolis, Idyrough and Ishor (2014), opined that female yam hawkers in Lafia metropolis who, are in

their economically active years and majorly none-literate encounter serious health challenges including body pain, fatigue, fever, accidents and isolated cases of sexual assault. Roadside hawking leads to increased exposure to antisocial activities like smoking, drug, alcohol abuse, cultism, crime, harsh weather, insect and reptile bites and hunger (Nduka and Duru, 2014).

Ignorance of occupational health hazards and diseases among workers result in high incidence of preventable diseases faced by workers in developing world. Benyen, Tulu and Abdo (2012), asserted that the reduction of occupational diseases among roadside workers depends on the level of knowledge of the health hazards in the daily practice of their working experience. Knowledge refers to familiarity, knowledge, or understanding of something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering or learning. Knowledge can also mean a theoretical or practical understanding of a subject (Wikipedia, 2016) Roadside workers are important workers in the working group who share in the global burden of occupational diseases.

Preventive measures are steps taken to guarantee one's safety while at work in order to enjoy good health. Tawaih (2011) opined that workers in most vulnerable setting should ensure responsibility for their health by taking appropriate preventive measures such as wearing protecting clothing. Other measures that can be adopted to prevent diseases at work include regular check up in the hospital, periodic exercises, rest, and good position while at work, good eating habit and prompt report of any abnormal symptom in the hospital.

In a study conducted by Ahmed and Newson-Smith (2010), to assess the knowledge and practice of workers in cement factory in Ras Al-Khaimah, UAE on the occupational hazards of their work, results showed that the majority 114 (74.5 %) of the workers knew that exposure to the dust was a serious hazard to their health, but only 52.9 per cent of the workers knew the hazards other than the dust that were associated with their work. All the workers mentioned that they had been provided with masks to protect them from dust. However, only 28.8 per cent of them claimed that they used the masks all the time during working hours. The variables: years of education, being informed about the hazards associated with the worker's job, and attending a training course about occupational health and safety were found to have a significant influence on the workers' knowledge about the occupational hazards and on their use of the personal protective equipment at work. The author noted that despite relatively high knowledge of the cement factory workers about the adverse health effects of exposure to dust, the use of respiratory protective equipment was poor. A program to promote safety education and the use of personal protective equipment among cement factory workers was recommended.

Similarly, Abdullahi, Oguntunde and Habib (2009), conducted a survey in 140 Nigerian poultry traders enquiring on their knowledge, attitudes and infection control preventive practices regarding Avian Influenza (AI). Knowledge was inadequate and the infection was perceived to be a low occupational hazard. Wearing protective equipment and hand washing were not routine practices. In logistic regression models, high educational level and risk perception were independent predictors of knowledge of AI with [Odds Ratio (95% Confidence Intervals)] 2.16 (1.03-4.54) and 5.36 (1.70-16.91) respectively. Belief that AI is a preventable and serious disease independently predicted behavior modification practices recorded 4.05 (1.28-12.81) and 3.24 (1.29-8.14) respectively.

A study was also conducted by Beyen, Tulu, Abdo and Tulu (2012), to assess knowledge and practice, and associated factors among barbers about biological hazards associated with their profession in Gondar town, North West Ethiopia. Out of 400 barbers, only 72 (18%) had good knowledge about biological hazards associated to their profession, While only 61 (15.3%) were practicing safely during barbering. Knowledge of the barbers was associated significantly with educational level, owner of the business, working hour and work experience, while practice was associated only with availability of UV sterilizers in the room and working hour. The author concluded that barbers' practice and knowledge to prevent biological hazards associated with their profession was very poor. Thus, giving training for the Barbers is required toward prevention of biological hazards associated to their profession.

The knowledge of occupational diseases in a particular workplace is an important strategy in adopting regular preventive practice in order to stay healthy at work irrespective of the type of work. It is therefore vital that roadside workers understand health risks associated with their work, if successful intervention to sustain optimal health is to be achieved. This background evoked the necessity to search into the knowledge of occupational diseases and practices of preventive measures among roadside workers in Uyo Metropolis, Akwa Ibom State.

Statement of the Problem

The rising populations of roadside workers in Uyo metropolis with unsafe working condition constitute a major concern as an important group of workers in an informal setting in the society. Their services are relevant to all groups of people in the community with consequent risk notwithstanding. Developing countries such as Nigeria are burdened with over population leading to high rates of unemployment thus contributing to the large

number of people seen on the side of the roads and streets engaging in one business or the other to make a living. Many studies have reported several diseases associated with roadside hawkers traders and vendors such as musculoskeletal disease, respiratory diseases, skin diseases, stress, mental disorders, accident and even death (Adaawen, 2011, Ekeanyanwu, 2012, Emmanuel *et al.*, 2012 & Idyorough, 2014). Several studies have also revealed low level of knowledge with inadequate preventive practices among workers (Abdullahi, Oguntunde and Habib 2009, Beyen, Tulu, Abdo and Tulu, 2012). Other studies) noted high level of knowledge but with low safety practices towards prevention of the hazards (Ahmed and Newson-Smith, 2010). From the researcher's point of view, these workers are exposed to various hazards in their working environments and experiences which predispose them to preventable diseases if adequate steps are not taken. It is in view of the aforementioned points that this study was developed to assess the level of knowledge of occupational diseases and practices of preventive measures among roadside workers in Uyo Metropolis, Akwa Ibom State.

Purpose of the Study

The general objective of the study was to determine the level of knowledge of occupational diseases and practice of prevention measures among roadside workers in Uyo Metropolis, Akwa Ibom State. Specifically, the study sets out;

- (1) to determine the level of knowledge of occupational diseases among roadside workers in Uyo Metropolis;
- (2) to determine the practice of preventive measures towards occupational diseases among roadside workers in Uyo Metropolis, Akwa Ibom State.

Research Questions

- (1) What is the level of knowledge of occupational diseases among roadside workers in Uyo Metropolis, Akwa Ibom State?
- (2) What is the level of practice of preventive measures towards occupational diseases among roadside workers in Uyo Metropolis, Akwa Ibom State?

Hypothesis

Ho: The levels of knowledge of occupational diseases and practice of preventive measures are not significantly high among roadside workers in Uyo Metropolis in Akwa Ibom State.

Research Design

A cross sectional survey design was adopted for the study. This design makes it possible for inference on the population to be drawn using the sample (Udoh & Joseph, 2005).

Target Population

The population of the study was 740 roadside workers who sell or render services by the road side on the major roads of Uyo Metropolis under shade of umbrella, trees or kiosks and are registered with Uyo Municipal Council.

Sample Size

The sample size was 200 respondents drawn through a purposive sampling technique on four major roads randomly sampled out of the nine major roads in Uyo Metropolis. Fifty respondents were purposively picked from each road to give a total of 200 respondents.

Instrument for Data Collection

The instrument used in collecting data was a self-structured questionnaire titled knowledge of occupational diseases and practices of preventive measures among roadside workers in Uyo Metropolis (KODPPMRW) distributed to 200 respondents at their different working locations.

Validity and Reliability of Instrument

The questionnaire was properly screened by three research experts to ensure face validity. Criticisms by these three expert in research were corrected and finally reproduced while a pilot study was administered to other roadside workers in Ikot Abasi Local Government Area of Akwa Ibom State who were not part of the study population. Kuder-Richardson (K-R) 21 formula was used to ascertain the internal consistency of the instrument. A reliability coefficient of .78 was obtained.

Method of data collection

The copies of the questionnaire were administered to the respondents and were collected back few minutes later for two days with minimal difficulties. This process was assisted by two research assistants who were properly trained and informed of the purpose of the study and data collection.

Method of data analysis

Descriptive statistics were used in analyzing the findings of the study. The researcher made use of frequency distribution Tables in analyzing data while percentages, was used to answer the researcher questions Chi Square was used to analyze the hypothesis at .05 level of significance.

Results

Research Question 1

What is the level of knowledge of occupational diseases among roadside workers in Uyo Metropolis in Akwa Ibom State?

Data answering the above research question is contained in Table1

Table 1: Level of Knowledge of Occupational Diseases among Roadside Workers in Uyo Metropolis, in Akwa Ibom State 2015
 n = 200

S/N	Item	Yes		No		Total
		F	%	F	%	
1	Can one suffer from any disease as a roadside worker?	162	81.0	38	19.0	100%
2	Which of these diseases can be associated with roadside work?					100%
	Malaria	148	74.0			
	Pneumonia	19	9.5			
	Cancer	10	5.0			
	Asthma	1	1.0			
	Appendicitis	8	4.0			
	Cholera	10	5.0			
	Scabies	4	2.0			
	Deafness	-	-			
3	Symptoms of diseases associated with roadside work are:					100%
	Common cold	54	27.0			
	Cough	70	35.0			
	Fever	38	19.0			
	Stomach pain	3	2.0			
	Inability to hear well	20	10.0			
	Eye pain	1	5.0			
	Sneezing	8	4.0			
	Back pain	1	1.0			
	Diarrhea	3	1.5			
	Waist Pain	1	0.5			
	Rashes on the body	1	0.5			

Table 1 above shows the frequency and percentage analysis on level of knowledge of occupational diseases among roadside workers. The response shows that roadside workers are knowledgeable of the occupational diseases with frequency of 162 (81%). Knowledge of malaria as a specific disease associated with roadside work had the highest response of 148 frequency, (74.0%) followed by pneumonia, with the frequency of 19 (9.5). Road side workers are not quite aware of other diseases associated with their work.

Research Question Two

What is the level of practice of preventive measures towards occupational diseases among roadside workers in Uyo Metropolis in Akwa Ibom State?

Data answering the above research question are contained in Table 2

Table 2: Practices of Preventive Measures towards Occupational Diseases in Uyo Metropolis, in Akwa Ibom State 2015
n=200.

S/N	Item	Yes		No		Total
		F	%	F	%	
1	Use of protective ear plugs when exposed to loud noise	86	43.0	114	57.0	100
2	Use of protective clothing during working hours	116	58.0	84	42	100
3	Reporting any abnormal symptom immediately in the hospital	105	53	95	48	100
4	Going to the hospital only when sick	157	79.5	43	21.5	100
5	Buying drugs from the chemist to treat health problems	136	68.0	64	32.0	100
6	Observing at least one hour rest before close of work	114	57.0	86	43.0	100
7	Doing exercise at least 3 times in a week	131	67.5	69	34.5	100
8	Covering the nose with mask when a heavy truck vehicle is approaching the work site	120	60.0	80	40.0	100

Result from Table 2 shows that the majority of respondents practice fairly the preventive measures by wearing protective clothing with frequency 116, (58.0%), followed by doing exercise at least 3 times a week. A greater number of the respondents go to the hospital only when they are sick by 157 frequency, (79.5%), while others buy drugs at the chemist to save time in treating their health problems with 136 frequency, (68%).

Hypothesis

Ho: The levels of knowledge of occupational diseases and Practice of Preventive Measures are not significantly high among roadside workers in Uyo Metropolis in Akwa Ibom State.

Table 3: Chi Square Analysis on Levels of Knowledge of Occupational Diseases and Practice of Preventive Measures among Roadside Workers in Uyo Metropolis in Akwa Ibom State.

S/N	Variable	Mean (\bar{X})	Standard Deviation (SD)	Cal- χ^2	Crit- χ^2	df
1	Knowledge of occupational diseases	6.89	2.7	176.09	21.0	12
2	Practices of preventive measures	11.18	2.2	69.10	15.51	8

Result from Table 3 shows the analysis of the levels of knowledge of occupational diseases and practice of preventive measures among roadside workers in Uyo Metropolis, Akwa Ibom State. The result shows that Calculated X^2 value of knowledge 176.09 is significant at .05 level of significance with the critical value of 21.0 and degrees of freedom (df) = 12, while the Calculated X^2 value of practice of preventive measures 69.10 is significant at .05 level of significance with the critical value of 15.51 and degrees of freedom 8= Therefore the null hypothesis is rejected because the knowledge of occupational diseases is significant and the practice of preventive measures among roadside workers is also significant among roadside workers in Uyo metropolis, Akwa Ibom State.

Discussion of findings

The result of the study shows that roadside workers in Uyo Metropolis have significant high knowledge of the occupational diseases associated with their work with 163, frequency and 82 percent. The practice of preventive measures by the respondents is significantly high in most items on the questionnaire such as use of

protective clothing at work, 116 frequency with 58 percent, reporting any abnormal symptom in the hospital 105 frequency, 53 percent, observing at least two hours rest before close of close, 114 frequency, 57 percent, doing exercise at least 3 times in a week, 131 frequency with 67 percent and covering the nose when a heavy truck approaches their location of work with 120 frequency, 60 percent. The knowledge of disease conditions associated with their work recorded high percentage and frequency on malaria and pneumonia. The knowledge of symptoms of diseases frequently experienced as a result of their work recorded high percentage on cough, common cold, fever, inability to hear well and sneezing.

The knowledge of occupational diseases as well as the practice of preventive measures among roadside workers in Uyo Metropolis, in Akwa Ibom State was noted to be significant as revealed by the findings on the hypothesis tested. The result of the present study does not support the study of Abdullahi, Oguntunde and Habib (2009), Beyen, Tulu, Abdo and Tulu, (2012), which noted low knowledge with inadequate practice of preventive measures. However, the present study supports the work of Ahmed and Newson-Smith (2010), which noted high level of knowledge though with low safety practices towards prevention of occupational hazards among the group of workers studied.

Conclusion

Based on the findings of the study, it was concluded that roadside workers in Uyo Metropolis have significant high knowledge of the occupational diseases associated with their work as well as significant high practices of preventive measures in order to prevent these diseases. Knowledge creates insight into any problem and serves as a better strategy motivating good practices of preventive measures to prevent any problem especially at work.

Recommendations

The following recommendations were made as follows:

- Road side workers should be enlightened on those illnesses/ diseases that they are not aware of.
- Health education of the roadside workers on the need for continuous and regular practices of preventive measures in order to stay healthy while at work.
- Government should be concerned about the working conditions of the roadside workers and build many work centers that provide comfort for these group of workers in the community in order to alleviate poverty, suffering and also prevent diseases arising from work and working conditions.

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