

KNOWLEDGE AND PRACTICE OF PREVENTION TOWARDS HEALTH HAZARDS AMONG ROADSIDE BARBECUE SELLERS IN EKET, AKWAIBOM STATE, NIGERIA.

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ABSTRACT

RESEARCH ARTICLE

The study was carried out to determine the knowledge and practice of prevention towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State. Three specific objectives were formed to guide the study while three research questions were raised and translated to three hypotheses for testing at .05 level of significance. A survey design was adopted to study a population of 526 while a sample size of 210 participants were drawn from three major roads in Eket Metropolis. The instrument for data collection was a self-structured questionnaire titled "Knowledge and Practice of Prevention towards Health Hazards among Roadside Barbecue Sellers Questionnaire" (KPPHHRBSQ). The response on the questionnaire were analysed using frequency, percentages, mean, while t was used to answer the research questions and hypotheses respectively. The study revealed that knowledge of health hazards and preventive measures among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was high while the practice of prevention was low as shown in the mean responses. The null hypothesis of no significant level of knowledge of health hazards among with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was rejected at .05 level of significance respectively while the null hypothesis that tested the practice of preventive measures was accepted at .05 level of significance. Based on the findings, it was concluded that the Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State are highly knowledgeable of the health hazards associated in their work while the practice of prevention towards the health hazards is low. Recommendations were made on periodic training to be organized by Public Health officers to create awareness on the health hazards associated with roadside barbecue business as well measures of preventing them among others

KEYWORDS: Knowledge, Practice, Prevention, Health Hazards, Roadside Barbecue Sellers

Introduction

Street food business continues to grow in Nigeria in a largely unregulated environment due to unprecedented urban growth, poverty, lack of employment and the demand for readymade and fast-food items by citizens who are struggling to cope with their tight schedules. Many people find employment in an informal setting such as roadside just to boost the economy and not for the joy of the occupation. Roadside Barbecues sellers are common in most cities

all over the world as a result of unemployment and lack of skill acquisition. Although, there has been a long tradition in many countries of consuming roadside foods as an alternative to home-prepared meals, this has assumed a survival and coping strategy for the urban dwellers in recent times and constitutes a part of the daily diet of these populations (Ernest, et al;2020).

Barbecue is grilled skewered meat or fishes spiced with locally sourced, mixed dry ingredients that is prepared and sold by the road side. Sadly, despite the benefits enjoyed by the services of the Roadside Barbecue Sellers in our society, the health hazards associated with the working conditions pose serious concerns to public health and wellbeing of the populace (Akutu & Odia., 2018). According to Afolabi (2019) over half of the labour force in developing countries is employed in the small scale enterprises in the informal sector of the economy. These workers however form the backbone of the Nigerian economy and contributed about 65 percent of the country's GDP in 2017(Bank of Industry, 2018). In these enterprises, health and safety hazards are high while preventive measures toward them are poorly implemented. This puts many business owners in developing countries at undue risks of fatal and non-fatal work-related health problems and associated medical costs and economic hardship.

The roadside barbecue sellers operate anywhere and anyhow on the roadside mostly in the urban cities in dirty areas around gutters and waste dumpsite. Their work entails standing for many hours, exposure to insects, dust, and fumes from exhaust and congested traffic, gaseous waste, and cold, heat from fire used for roasting several barbecue delicacy, air and noise pollution on the road. These result in so many health conditions affecting the barbecue sellers such as allergies manifested in skin rash, cough and asthma, eye irritation and pain, accidents, injuries such as hand burns, knife cuts and frequent malaria from exposure to mosquito bites from the unsanitary sites where they operate from as well as oedema from long standing position amongst others.

Additionally, Baluka, et al; (2015) noted that customers who patronize roadside barbecue sellers face several food-borne diseases which include diarrhoea, cholera, food poisoning and abdominal pain, cancer and subsequently the loss of human lives. These diseases may be derived from many sources of contamination of the edible product such as during transportation of raw meat to barbecue preparation site, process of preparation, prolonged exposure of barbecue meat on the road to flies and dust, unhealthy method of preserving leftover meat, and inadequate cleanliness of business sites and equipment used. It is not uncommon to see flies perching on barbecue and foods displayed by the roadside.

Practice of prevention is key to reduction of work hazard irrespective of type. According to Tuglo, et al; (2021) workers in most vulnerable setting should ensure responsibility for their health by taking appropriate preventive measures. Preventive measures are steps taken to guarantee one's safety while at work in order to enjoy good health. Strict compliance to sanitary measures, regular hand washing, regular check up in the hospital, periodic exercises, and use of protective clothing at work, are some of the recommended preventive measures employed to reduce health hazards associated with barbecuing (Food Standard Agency, 2025).

Good knowledge of health hazards and proper practices of prevention among roadside barbecue sellers operating in most cities is an important strategy in order to stay healthy at work and prevent spread of diseases in the community. Ebong & Ukpe (2016) submitted that adequate knowledge of occupational diseases revealed in their study of occupational diseases

and practice of preventive measures among roadside workers in Uyo metropolis, Akwa Ibom State significantly influenced the practice of preventive measures among roadside workers while Ogunna, et al; (2018) in their study on knowledge, attitudes and beliefs about health hazards of biomass smoke exposure amongst commercial food vendors in Nigeria revealed limited knowledge about the adverse health effects of biomass smoke exposure and negative attitudes towards preventing these adverse health effects.

Roadside Barbecue Sellers provide a diverse range of inexpensive foods to low and middle income city dwellers in urban cities across the world and work in various strategic locations in the urban cities that easily enable them to make sales and render fast services to different customer. It is therefore vital that roadside barbecue sellers are knowledgeable about the hazards associated with their work and how to prevent them in order to promote health and wellbeing during working hours. Against this background, this study is carried out to investigate the extent of knowledge and practice of prevention towards health hazards by roadside barbecue sellers in Eket Metropolis, Akwa Ibom state, Nigeria.

Statement of the Problem

Certain work conditions and environment present serious implications for health, quality living and longevity for several people in the community. Roadside barbecue sellers which operate on an informal work setting are on the increase in urban cities with relevant services to all groups of people in the community. They are seen on the road in the evenings operating under adverse conditions at unhealthy worksites and conditions selling barbecued meat, fish and other edible delicacy. The conditions inherent in their work such as exposure to prolonged standing, cold, fire, dust, fumes, insects and flies to mention a few presents serious health consequences if adequate steps are not taken to protect their health and their customers within the community. Food related illnesses affects negatively the health and wellbeing of many developing nations as a result of in appropriate and unsafe food business. Food poisoning occurs as a result of consuming foods contaminated with microorganism or their toxins arising from inadequate preservation methods, unhygienic handling practices during preparation. This also allows for cross transmission of disease causing organisms such as bacteria, viruses and food borne pathogens.

The significant of this burden globally and especially in developing countries demands positive steps taken towards reduction in morbidity and mortality as well as alleviation from suffering due to work and food related issues. Hence, adequate knowledge of health hazards among Roadside Barbecue Sellers is necessary for positive steps toward prevention. From the researcher's observation in Eket Metropolis, the alarming increasing numbers of Roadside Barbecue Sellers in every street as a means of income and livelihood constitute a huge burden to be investigated in order to ascertain the extent of their knowledge of the health hazards associated in their work and practice of prevention to protect themselves and other people in the community patronizing their business. This study is thus an attempt at investigating the knowledge and practice of prevention towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State, Nigeria.

Objectives of the Study

The objectives of the study were as follows;

1. Assess the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State.
2. Determine the knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State.

3. Examine the practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State

Research Questions

The following research questions were considered for the study.

1. What is the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?
2. What is the level of knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?
3. What are the practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?

Research Hypotheses

1. There is no significant level of knowledge of work related health hazards among Roadside Barbecue Sellers in Eket Metropolis.
2. There is no significant knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.
3. There is no significant practice of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.

METHODOLOGY

Research Design

The study adopted descriptive survey research design. This was considered appropriate for the type of study carried out.

Population of the Study

The research population includes the entire population of 526 roadside barbecue sellers who are resident or do business in Eket metropolis, Eket L.G.A.

Sampling Procedure and Sample Size:

A sample of 210 roadside barbecue sellers which constitute 40 percent of the total population were selected using a multistage sampling technique from across Eket Metropolis.

Instrument for Data Collection

The instrument used to collect data for the study was a self-structured questionnaire titled “Knowledge and Practice of Prevention towards Health Hazards among Roadside Barbecue Sellers Questionnaire” (KPPHHRBSQ). The instrument consisted of two sections. Section A was made up of questions to collect information on knowledge of health hazards among roadside barbecue sellers while section B elicited information on the practice of prevention toward health hazards among roadside barbecue sellers in Eket Metropolis, Akwa Ibom State.

Data Validation and Reliability

The reliability and validity of the instrument was achieved through a pilot study involving a neutral group of 15 roadside barbecue seller in Abak Local Government Area of Akwa Ibom State which was not part of the study. The obtained data were analyzed using Pearson

Product- Moment Correlation Coefficient. The coefficient stood at 0.86. The results of the pilot study showed that the questionnaire was relevant, well designed and easy to understand.

Method of Data Collection

The Knowledge and Practice of Prevention towards Health Hazards among Roadside Barbecue Sellers Questionnaire (KPPHHRBSQ) was administered with the aid of two trained assistants to 210 roadside barbecue sellers during evenings from between 5 pm to 9pm after obtaining informed permission from them to take part in the study for the purpose of acquiring data on the knowledge and practice of prevention towards health hazards among them. Some of the respondents could not read so they had to be guided in answering the questions. Collecting data required moving around the city at night as most of the roadside barbecue sellers did their business at night during the hours of 5pm to 11pm.

Method of Data Analysis

Frequency and percentage were used to analyze the socio-demographic data of the participants while mean (\bar{X}) was used to answer the research questions at cut off of 1.50 and t-test was used to test the hypotheses at 0.05 level of significance. Responses above 1.50 was considered high while below was regarded as low with mean.

RESULTS

Research Question 1: What is the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?

Table 1: Mean responses of the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State.

		n = 210	
S/N	Items	Mean(\bar{X})	Decision
1.	Which of these conditions are Roadside Barbecue Sellers exposed to during working period?		
	Prolong standing	1.56	High
	Injury	1.61	High
	Cold	1.53	High
	Dust	1.32	Low
	Fume from exhaust	1.70	High
	Foul smell	1.27	Low
	Insect bites	1.63	High
	Too much noise on the road	1.56	High
	Exposure to burns	1.54	High

Cut off mean = 1.50

Table 1 above shows the mean response of the respondents on the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers. The table revealed

that generally, the level of knowledge on work related health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was high.

Research Question 2: What is the level of knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?

Table 2 Mean (\bar{x}) responses of the level of knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State

		n=210	
S/N	Items	Mean(\bar{x})	Decision
1.	The use of protective eye glasses can prevent health hazards during Barbecue work	1.54	High
2.	The use of protective clothing can reduce health hazards during roadside barbecue work	1.67	High
3.	The use of nose mask can prevent health hazards during Barbecue work	1.57	High
4.	Regular exercise can help in preventing problems of prolonged standing at work	1.45	Low
5.	Regular washing of hands can prevent diseases and spread from one person to another	1.57	High
6.	Regular health checks can reduce the effect of health hazards associated with Roadside Barbecue Sellers	1.44	Low
7.	Routine cleanliness of business sites can prevent many diseases during Roadside Barbecuing work	1.58	High

Cut off point =1.50

Table 2 above shows the mean response of the respondents on the level of knowledge of preventive measures toward health hazards among Roadside Barbecue Sellers. The table revealed that the level of knowledge on most items was high with the score above the mean cut off. Generally, knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was high.

Research Question 3: What are the practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State?

Table 3: Mean \bar{x} responses of the practices of preventive measures towards health hazards among Roadside Barbecue Sellers

		n=210	
S/N	Items	Mean(\bar{x})	Decision

1.	I wear protective eye glasses while standing on the road during my working hours	1.37	Low
2.	I wear protective clothing during working period	1.42	Low
3.	I cover my nose with nose mask during my working hours	1.34	Low
4.	I wash my hands with soap and water before preparing barbecue for my customers	1.63	High
5.	I clean the environment around my business sites every day before I start my business	1.56	High
6.	I do exercise at least three times a week	1.11	Low
7.	I visit the hospital for checkup at least twice a year	1.32	Low

Cut off point =1.50

Table 3 above presents the result of the analysis on the practices of preventive measures towards health hazards among Roadside Barbecue Sellers. This result revealed that the practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was low as a low mean value was obtained in most items tested.

Research Hypothesis 1: There is no significant knowledge of work related health hazards among Roadside Barbecue Sellers in Eket Metropolis Akwa Ibom State.

Table 4: t-test analysis of the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers

S/N	Items	N	df	Mean(\bar{x})	p-values	t-value	Decision
1.	Which of these conditions are Roadside Barbecue Sellers exposed to during working period?						
	Prolong standing	210	209	1.56	.043	1.804	S
	Injury	210	209	1.61	.001	3.394	S
	Cold	210	209	1.53	.035	.966	S
	Dust	210	209	1.32	.063	5.276	NS
	Fume from exhaust	210	209	1.70	.000	7.237	S
	Foul smell	210	209	1.27	.066	6.309	NS
	Insect bites	210	209	1.63	.000	4.000	S
	Too much noise on the road	210	209	1.56	.000	26.282	S
	Exposure to burns	210	209	1.54	0.15	1.244	S

Table 4 above presents the t-test analysis of the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers. The Table revealed that for some items, the t-values range from .966 to 26.282. The p-values which range from .000 to .043 are less than the alpha level of .05. Based on this, null hypothesis one that stated that there is no

significant knowledge of work related health hazards among Roadside Barbecue Sellers in Eket Metropolis was rejected. While for the other two items, Roadside Barbecue Sellers exposed to dust during working period (item 4) and Roadside Barbecue Sellers exposed to foul smell during working period (item 6), the t-values range between 5.276 to 6.309. The p-values for these items (.063 and .066) are greater than the alpha level of .05. This implies that the null hypothesis one was upheld on these items. Generally, the table above revealed that there is significant knowledge of work related health hazards among Roadside Barbecue Sellers in Eket Metropolis.

Research Hypothesis 2: There is no significant knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.

Table 5 t-test analysis of the knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers

n=210							
S/N	Items	N	Df	Mean(\bar{x})	p-value	t-value	Decision
1.	The use of protective eye glasses can prevent health hazards during Barbecue work	210	209	1.54	.004	2.951	S
2.	The use of protective clothing can reduce health hazards during roadside barbecue work	210	209	1.67	.001	.138	S
3.	The use of nose mask can prevent health hazards during Barbecue work	210	209	1.57	.001	.689	S
4.	Regular exercise can help in preventing problems of prolonged standing at work	210	209	1.45	.215	1.244	NS
5.	Regular washing of hands can prevent diseases and spread from one person to another	210	209	1.57	.000	.82 n=2107	S
6.	Regular health checks can reduce the effect of health hazards associated with Roadside Barbecue Sellers	210	209	1.44	.129	2.229	NS
7.	Routine cleanliness of business sites can prevent many diseases during Roadside Barbecuing work	210	209	1.58	.000	1.244	S

Table 5 above presents the t-test analysis of the knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers. The Table indicated that for some items, the t-values range from 138 to 2.951. The p-values which range from .000 to .004 are less than the alpha level of .05. Based on this, null hypothesis two that stated that there is no

significant knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis was rejected. While for the other two items, Regular exercise can help in preventing problems of prolonged standing at work (item 4) and Regular health checks can reduce the effect of health hazards associated with Roadside Barbecue Sellers (item 6), the t-values range between 1.244 to 2.229. The p-values for these items (.214 and .129) are greater than the alpha level of .05. This implies that the null hypothesis one was upheld on these items. Generally, the table above indicated that there is significant knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.

Research Hypothesis 3: There is no significant practice of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.

Table 6: t-test analysis of the practice of preventive measures towards health hazards among Roadside Barbecue Sellers

		n = 210					
S/N	Items	n=210	Df	Mean(\bar{X})	p-values	t-value	Decision
1.	I wear protective eye glasses while standing on the road during my working hours	n=210	209	1.37	.060	12.287	NS
2.	I wear protective clothing during working period	n=210	209	1.42	.129	1.523	NS
3.	I cover my nose with nose mask during my working hours	n=210	209	1.34	.060	.413	NS
4.	I wash my hands with soap and water before preparing barbecue for my customers	n=210	209	1.63	.000	3.847	S
5.	I clean the environment around my business sites every day before I start my business	n=210	209	1.56	.027	2.229	S
6.	I do exercise at least three times a week	n=210	209	1.11	.059	4.786	NS
7.	I visit the hospital for checkup at least twice a year	n=210	209	1.32	.084	15.165	NS

Table 6 above presents the t-test analysis of the knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers. The table indicated that for some items 1-7, the t-values range from .413 to 15.165. The p-values which range from .059 to .129 are greater than the alpha level of .05. Based on this, null hypothesis three that stated that there is no significant practice of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis was accepted. Generally, the table above indicated that there is no significant practice of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis.

DISCUSSION OF FINDINGS

The findings of the present study revealed that the level of knowledge of work related health hazards associated with Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was high. Hypothesis one showed that there is significant knowledge of work related health hazards among Roadside Barbecue Sellers in Eket Metropolis with more p-values less than the alpha level of .05. The result of the present study also contradicts the findings of Ogonna, et al (2018) who conducted a study on knowledge, attitudes and beliefs about health hazards of biomass smoke exposure amongst commercial food vendors in Nigeria. The findings revealed that the respondents had limited knowledge about the adverse health effects of biomass smoke exposure and negative attitudes towards preventing these adverse health effects.

However, the study is in line with the findings of Ebong and Ukpe (2016) who conducted a related study on knowledge of occupational diseases and practice of preventive measures among roadside workers in Uyo Metropolis, Akwa Ibom State and revealed that roadside workers in Uyo Metropolis had adequate knowledge about diseases associated with their work. The results of the present study could be influenced by so many factors such as health hazard sensitization on radio most especially during the Covid-19 pandemic and also the level of education of the participants.

The findings of the present study also revealed that the knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was high. The hypothesis two also support that there is significant knowledge of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis with more p-values less than the alpha level of .05. The findings is in support of Eyo and Ukpe(2016) carried out a study on knowledge, attitudes and practices of hand washing towards the prevention of transmissible diseases among hair dressers in Uyo Metropolis , Akwa Ibom State, Nigeria and revealed that knowledge of hairdressers about transmissible diseases and preventive measures was adequate. The socio- demographic characteristics of the participants may also contribute to the high level of knowledge. The findings of this study supports the results of study conducted by Iwar (2017) on hygiene practices among suya sellers in Abuja, the Federal Capital of Nigeria which revealed adequate knowledge of hygiene measures among the participants.

The findings of the present study revealed that the practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State was low. The hypothesis three also showed that there is no significant practices of preventive measures towards health hazards among Roadside Barbecue Sellers in Eket Metropolis with more p-values greater than the alpha level of .05. The findings disagrees with Eyo and Ukpe (2016) who found out that knowledge of hairdressers about transmissible diseases s was adequate and that significantly influenced the practice of prevention positively. The findings is not also in support of Tuglo,et al; (2021) who conducted a study on food safety knowledge, attitude and practices of street – cooked food hygiene handlers in NorDayi District, Ghana and revealed good levels of knowledge, attitude and practice of food safety.

The result of the present study is a clear indication that the knowledge people acquire is not utilized. This may be attributed to the fact that some people see health preventive measure as a waste of time or the symptoms of diseases as not life threatening thereby ignoring the measures to prevent them and promote positive work habits. The Roadside Barbecue Sellers may see themselves as working in an informal setting where compliance to preventive

measures may not be an important consideration. Notably too, most workers both in formal and informal settings do not adhere to wearing personal protective equipment to prevent diseases and promote their health where the risks abound to themselves and other persons in the society. The findings of this study supports the result of study by Iwar (2017) whose findings revealed that participants' understanding of hygiene was adequate which related to their popular culture rather than science, but with high level of contamination of suya due to poor practices of hygiene, According to Afolabi, (2019) workers should visit the hospital without being sick and during early signs of disease manifestation for early detection and effective treatment respectively. This will help in making them healthy and prevent spread to other people.

CONCLUSION

Based on the findings, it was concluded that the Roadside Barbecue Sellers in Eket Metropolis, Akwa Ibom State are highly knowledgeable of the health hazards associated in their work while the practice of prevention towards the health hazards is low.

RECOMMENDATIONS

The following recommendations were made:

- 1) Periodic training should be organized by health officers to create awareness on the health hazards associated with roadside barbecue business as well measures of preventing them.
- 2) Governments should make policies to regulate the operation of roadside barbecue sellers including the location of operation of the business to control contamination of the grilled meat and spread of diseases in the community.
- 3) Routine supervision of the of the roadside barbecue sellers by Environmental Agency and Ministry of Health to ensure compliance with disease control and preventive measures.

REFERENCES

- Afolabi, F. (2019). Workplace health and safety in the informal sector. A case study of Nigerian entrepreneurs. Barcelona, Spain: international Conference on Applied Research Business Management and Economics.
- Akutu, G. & Odiya, I.T. (2018). Dangers of uncovered food. Accessed on <https://www.nairaland.com> 26th April, 2022.
- Bank of Industry (2018). Economic development through the Nigerian informal sector. Accessed on [https://www.boi.ng/wp-content/uploads/2018/05/BOI-working-paper-series-no2 Economic Development- through – the-Nigerian- informal-sector](https://www.boi.ng/wp-content/uploads/2018/05/BOI-working-paper-series-no2-Economic-Development-through-the-Nigerian-informal-sector). Accessed on 20th April, 2022.
- Chughtai, A., A. & Khan, W. (2020). Use of protective equipment to protect against respiratory infection in Pakistan. A systematic review. *Journal of Infection and Public Health*, 13(3): 385-390.
- Ebong, R. D. & Ukpe, E. A. (2016). Knowledge of occupational diseases and practice of preventive measures among roadside workers in Uyo metropolis, Akwa Ibom State. *Nigerian Journal of Health Promotion*, 9, 2016, 15-22.

- Ernest, et al; (2020). *Health hazards associated with ready-to-eat-meat in Nigeria: a call for public health concern and critical interventions. Meat Technology*, 6 (2): 129-144.
- Eyo, U. & Ukpe, E. (2016). Knowledge, attitudes and practices of hand washing towards the prevention of transmissible diseases among hair dressers in Uyo metropolis. *European Journal of Business and Management*, 8(22): 223-232.
- Food Standard Agency (2025) BBQ food safety. Retrieved on food.gov.uk. 12th May, 2025.
- Iwar, V. (2017). Hygiene beliefs, attitudes and practices of suya producers in Nigeria accessed on <https://research.gate.net> 20th April 2022.
- Ogonna, N.O., Mokogwu, N, Agboghroma, O., Ahmed, O. & Mortimer, K. (2018). Knowledge, attitudes and beliefs about health hazards of biomass smoke exposure amongst commercial food vendors in Nigeria. *PloSONE*, 13 (1). Accessed on <https://www.journalplos.org/plosone> 17th March, 2022
- Olaoye, O.J. & Ojebiyi, W. G. (2020). Occupational health hazards associated with Nigerian fisheries. Accessed on <https://www.intecopen.com> 7th April, 2022.
- Tuglo, L.S., Agordoh, P.D. & Chu, M. (2021). Food safety, knowledge, attitude and hygiene practices of street-cooked food handlers in North Dayi District, Ghana. *Environmental Health and Preventive Medicine*. 26 (54). 245-257.