

ATTITUDES OF FOOD HANDLER'S IN CENTRAL ZONE OF TARABA STATE TOWARDS KNOWLEDGE AND PRACTICES OF FOOD HYGIENE

B.M. ADAMU¹; & S. I. ABUBAKAR²

¹Clinic, Federal Polytechnic Bali, Taraba State Nigeria. ²Department of Agricultural and Bioenvironmental Engineering Technology Federal Polytechnic, Bali

ABSTRACT

This study examines the attitudes of food handlers in the central zone of Taraba state towards knowledge and practices of food hygiene. The population of the study is 600 food handlers (comprising of 200 each from Bali, Gashaka, Gassol, Kurmi and Sardauna Local Government Areas selected at random). However, 360 questionnaires were finally retrieved (87 for Bali, 59 for Gashaka, 98 for Gassol, 61 for Kurmi and 97 for Sardauna). The results obtained were analysed using simple descriptive statistics. The information gathered indicated that 97% of the respondents did not undergo any training on food handling. In addition 95% are not using any form of personal protective

Introduction:

Food hygiene is defined as all conditions and measures taken to safeguard the quality and safety of food from production to consumption or from farm to fork (food chain). It also includes the collection and disposal of wastes on the environment. It a problem in both developing and developed countries. Food borne disease affects infants, young children, elderly and sick. It hurts the national economy and development and international trade. The growing number of food - related worries has

equipment (e.g. apron and cap) while handling or processing food. Only 37% of the respondents make provision of disinfectants to customers in their food businesses and only 29% knows about food poisoning. Finally 78% of the respondents believe that continues awareness should serve as good step in educating food handlers on how to prevent the spread of food borne diseases. It is recommended that authorities should embark on programmes that will educate food handlers so as to curtail the spread of food borne diseases.

Keywords: Attitudes, Food handlers, Central zone, Knowledge, Hygiene.

Led to calls for better hygiene and quality practices. Food hygiene and safety practices in Nigeria are below standard and unsatisfactory and are responsible for the high prevalence of food borne diseases arising from consumption of contaminated food (Food Hygiene Initiative of Nigeria, (FHI) 2020).

Hawking of food is a common scene on our highways. The open display and exposure of raw, cooked and ready – to – eat food meant for human consumption to contaminants such as dust and flies and other environmental factors is a common practice which has largely contributed to the cause of food borne diseases. These diseases which manifest in form of gastro intestinal disorder, kidney dysfunction, cancer and even death have continued to form a significant part of mortality.

There is a strong statistical evidence that the incidence of food poisoning cause by caterers is greater than in any other food sector, accounting for 70% of all bacterial food outbreaks. The hands of food service employee can be a vector in the spread of foodborne disease because of poor personal hygiene. For example, an employee might contaminate his hands when using the toilet, or bacteria might be spread from raw meat to salad greens food handlers' hands (Bas, *et al*, 2016). A study in the USA suggested that

improper food handler practices contributed to approximately 97% of foodborne diseases in food service establishments and homes (Howes *et al*, 1996)

Most of the people involved in food businesses, food handlers are neither aware of the importance of food hygiene and safety nor the environment in which these foods are produced or vended conducive. Food borne illness may occur from contamination arising from poor or careless food handling at any stage between production, preparation, cooking and consumption. Foodborne illness is a problem in our society is very common in the study area. The purpose of this study is to evaluate the knowledge, attitudes, and practices among food handlers with regard to food hygiene in Central Senatorial Zone of Taraba State Nigeria.

Objective of the Study

The objective of this study was to maintain safe food handling practices and protect public health and reduce the danger of foodborne diseases among the people in the area and beyond. Specifically, the study sought to;

1. Measure the knowledge of food handlers towards food hygiene practices
2. Create awareness on personal hygiene practices to the public
3. Recommend to the authorities how to improve personal hygiene practices among food handlers.

Materials and Methods

Study Area

The central senatorial zone of Taraba state is the most populated zone in Taraba state comprising of five (5) local governments areas thus: Bali, Gashaka, Gassol, Kurmi and Sardauna. According to the National

Population Commission web assessed on 18th January, 2023 the zone has a population of 858,915.



Figure 1: Map of Taraba State Showing the central zone.

Methods

The zone is divided into 5 areas; Bali, Mutum Biyu, Serti, Gembu and Baissa. A written questionnaire is prepared for this study, followed by a face – to – face interviews with managers of food business premises in each of these areas to ensure the accuracy of the responses. Six hundred (600) copies of questionnaires were administered and three hundred and sixty (360) were retrieved and analysed. The population of the study comprised of food handlers selected at random in 5 food businesses from the five Local Government Areas. The food businesses include; restaurants, school food services, hotels, street food vendors and local food houses. Ten assistants (two for each local government area) are used in conducting the study. The assistants were selected based on their educational backgrounds

knowledge in food and nutrition. The respondents were given sufficient time to answer the questionnaire.

The food safety knowledge questions is assigned to obtained information about food handlers' knowledge of personal hygiene, food poisoning, cross-contamination, food preparation, temperature control and storage, working area, handling raw and cooked food. To reduce the response bias, the multiple choice answers include "not sure". The respondent's sociodemographic characteristics such as (gender, age, educational level, experience in food service operations food service training). The scores are ranged and converted to 100% point.

Questions related to food handler's attitudes towards food safety was asked. Food handlers indicated their level of agreement using a three-point rating scale (3 = agree, 2 = uncertain and 1 = disagree). For both knowledge and attitude part the correct answers will be converted to 100% and marks below 50% is considered low knowledge or attitude. Data analysis using descriptive statistics was used for data analysis.

Results and Discussion

This section is aim at data presentation of the respondents' characteristics from the five selected local government of the study area.

Table 1. Respondents Characteristics

Male	95	38%
Female	155	62%
Age less than 18 yrs	17	6.8%
17 to 25 yrs	145	58%
26 to 35 yrs	25	10%
36 to 45 yrs	21	8.4%
Over 45 yrs	8	3.2%

<i>Level of education</i>		
Primary level	35	14%
Secondary level	167	66.8%
Tertiary level	33	13.2%
No educational level	15	6%
<i>Occupation</i>		
Food related	198	79.2%
Non Food related	45	17.2%

The figures above denote that 62 % of the respondents from the sample size of 250 are female while the male percentage is 38% respectively.

Moreover, 58% of the respondents age variation are those age ranging from 17 to 25 years' adults and the least are ages over 45years with 3.2%, whereas 26 to 35years has 10%, 36 to 45years 8.4% and those less than 18 years form the remaining 6.8%.

However, majority of the respondent served with the questionnaire are secondary levers with high score of 66.8% and 6% are people not exposed to modern education. Tertiary level education has 13.2% and primary level is 14% respectively. The data shows that 79.2% are food related occupants and 17.2% belongs to non-food related occupation. Hence the questionnaires were rightfully distributed at the schools kitchens, restaurants, and street food handlers.

Table 2. Food safety knowledge, attitudes and practice questions

Questions	Agree	Uncertain	Disagree
Do you cook prepare, sell, or serve food at your premises hygienically?	72.4%	0	27.6%
Practicing safe handling of perishable foods e.g. meat, fish and	71.6%	2.4%	22.4%

dairy food is a public health measures.			
Safety training in food hygiene is a good preventive goals.	98%	0%	2%
Provision of safety hand wash with soap, control food borne diseases	74.4%	1.6%	23.6%
Availability of hand disinfectant protect the food handler and the consumer from diseases related to food .	37%	0	63%
Group discussion and community health education on food hygiene are basis for prevention and change of attitude.	80%	1.2%	18.8%
Use of head caps and aprons are good practices in food handling.	95%	0%	5%
Poor personal and environmental hygiene is the basic cause of food borne diseases.	74.4%	0%	25.6%
Continues awareness is a good step to prevent the spread of food borne diseases.	79%	2%	19%

Food safety knowledge, attitudes and practice questions

Majority of the respondents in the study area (72.4%) had agreed that their cooks hygienically prepare, sell and serve food to their customers in their business premises with 72.4% score , while 27.6% contradict the idea. Additionally, majority of the respondents numbering to about 71.6 % agreed that safe handling of perishable foods such like meat, fish and dairy

foods is a very good step of public health approach, and only 22.4% disagreed with the notion. The figure indicates that 79.4% and 74.4% agreed in the view that provision of safety hand wash with soap and safety training in food hygiene are essential measures in prevention and control of food borne diseases in our society. Whereas 23.4%, and 18.8% disagreed with the notion. Another 74.5% agreed with the idea that availability of hands disinfectant is another strong step for the protection of food handler and their customer in the business premises, while 22.4% of the participants disagreed and 2.4 % are uncertain with that.

Moreover, 78.5% of the participants agreed that proper use of caps and aprons are good practice in food handling, 20% are uncertain about the idea and 0.8% disagreed with the statement. Poor personal and environmental hygiene of the food processing premise is the basic cause of food borne diseases as over 74% agreed and the few more than 25% disagreed. The table shows that 80% and 78% agreed with the statement that group discussion, community health education and continues awareness are the basis for attitudinal change and prevention of the spread and transmission of food borne diseases.

In conclusion this section outlined participant's views in addressing their knowledge, attitude and practice in handling food in their respective business premises.

Table 3. Interview Questions on good practice of food handling in the business premises.

Questions	Yes %	Undecided %	No %
Do you wear caps, apron when processing or handling food?	4%	1%	95%
Do you provide disinfectant to your customer?	37%	0%	72%

Do you often measure the temperature of your stored food?	2%	0%	97%
Do you undergo training on food handling?	3%	0%	97%
Do you know what food poison is?	29%	17%	51%

The above table shows that a great number of about 95% participants do not use cap and apron while processing and handling foods and only 4% use the good practice of wearing cap and aprons during food handling and 1% undecided. About 72% food handlers have exposed their customer to dangers of food poisoning by not providing disinfectant in their business premises, but the minor few of 37% of the handlers provides the disinfectant for the customer for their safety. However, almost all the participant contacted, 97% were not aware of temperature measurement of the stored food practice and do not undergo training on food safety and handling respectively. Therefore 51% do not know what food poisoning is all about and only 29% have the limited knowledge on food poisoning and the remaining 17% did not decided on the question.

However, this table indicates participant level of awareness on food safety and handling procedure to alleviate the customer vulnerability to food poisoning and its dangers to consumer within central senatorial district of Taraba state.

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