# Health Information and the Sanitary Conditions around Local Eateries: Nigerian South Eastern Universities' Perspectives

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#### Abstract

Local eateries remain one of the most ubiquitous sights in universities in southeast Nigeria. They are scattered at different points on campuses ready to serve the "famished" undergraduates, who besiege them often in order to satisfy their hunger. Irrespective of the heavy presence of these local eateries and huge patronage they get from students, research has shown that a large number of them operate in poor and unhygienic environment. The implication of this is that students, who are the main customers to these local eateries, are exposed to health hazards. Against this backdrop, this study looked at these local eateries with the view of finding out the proportion of students who are aware of their sanitary conditions. The study also examined students' assessment of the eateries and their attitude towards them. Using a sample size of 400 respondents that cut across different universities in the south eastern part of Nigeria, the study found that a significant proportion of the students in these southeastern universities are aware of the sanitary conditions of local eateries in their area; these eateries are in fairly good condition and that students in south eastern universities have a careless attitude towards the sanitary condition of local eateries on their campuses.

**Keywords -** Eateries, sanitary conditions, health information, health hazards, food-borne sicknesses

## I. INTRODUCTION

Health remains one of the important variables in the life of every human being. Good health certainly is good life; for one to be productive in whatever career one chooses, one needs to have good health. The above statement somewhat explains the reason behind the saying, "health is wealth." Interestingly, one of the areas that human beings have had their health continuously sustained is through the intake of healthy food. It might be instructive to note that local eateries have remained a strong link in the supply of food to humans. [1] These eateries which are scattered in virtually different areas where people live

do well to provide food for them. In addition, the heavy presence of these food "joints" in universities to large extent demonstrates how important they are in the chain of food distribution, human sustenance and ultimately, human survival. Large numbers of students in these universities as well patronize these local eateries to at least, "keep body and soul" intact. Nemeh, Hailu & Balachew throw some light to the above submission when they write:

In many developing countries, including Nigeria, local eateries have formed the integral part of the food supply chain, particularly following the advent of urbanization. The street food industry has contributed immensely to human and economic development; as studies conducted in some of the African countries like Nigeria, Morocco and Kenya have shown that major food vendors usually earn above the countries minimum wage. [2]

In Nigeria, students of tertiary institutions spend as much as half of their food expenditure on local eateries. The food sector in Nigeria just like some other developing countries is confronted with myriads of problems, these problems "are somewhat connected to factors like inadequate supervision facilities, environmental monitoring by food safety officers, lack of training in food safety practices and good hygiene. [3] The effect of these problems in the food sector is that people who patronize these eateries are most times, exposed to the risk of getting contaminated. FAO notes that "most countries in the developing world today face a lot of challenges as a result of their sanitation culture." This situation, sadly, has given rise to a situation where food items made for human consumption are prepared in very poor sanitary environments and as it were, exposed people to health risk. [4]

Unfortunately, Nigerian tertiary institutions have been identified as one of the places where these local eateries operate, a large number of students in the institutions are also known to patronize these local eateries; this is irrespective of the sanitary condition of the eateries.[5]

This study thus sets out to investigate the sanitary condition of local eateries in university campuses

around the eastern part Nigeria; it is going do this looking at the perspective of students.

#### II. STATEMENT OF PROBLEM

One of the ubiquitous sights in Nigerian universities today is the presence of local eateries. These eateries are so scattered in the nook and cranny of different university campuses in Nigeria that one wonders whether they are the only lucrative business around the university community. Interestingly, these eateries are always busy, with hungry students besieging them to satisfy their hunger. Sadly though, large numbers of these eateries have been implicated not only in their very poor handling of food, but doing business in unhygienic and dirty environment. This situation apparently exposes customers of these eateries, who are mainly university students to outbreak of food-borne diseases, thereby endangering their health. Besides, research evidence have shown that factors like lack of basic infrastructure, poor knowledge of hygiene and practices in food service establishments can lead to poor sanitary condition in local eateries. [6] Surprisingly, in spite of these facts, large numbers of students still patronize these eateries daily.

Against this backdrop, one question becomes vital, to what extent are students of Nigerian universities really aware of the insanitary conditions of some of local eateries on their various campuses; and if they are aware of these at all, how do they assess such conditions? Also, an d more importantly, to what extent do these students take action to avoid being victims of food poisoning and health hazards which these local eateries most times pose?

## III. THE OBJECTIVE OF THE STUDY

Against the backdrop of the research problem the study examined the extent that university students in the South Eastern part of Nigeria are aware of the sanitary conditions of local eateries on their campuses. The study sought answers to following questions:

- 1. What proportion of university students in the south east is aware of the sanitary condition of local eateries on their campus?
- 2. What is the assessment of these students of the sanitary condition of local eateries on their campuses?
- 3. What is the attitude of these students to the sanitary condition of local eateries on their campuses?

## IV. REVIEW OF LITERATURE

Although the safety of food served in and around local eateries in Nigerian tertiary institutions have remained an issue of growing concern, the unhygienic environment where the owners of these local eateries prepare and sell food contribute even more challenge to the society. Food safety issues in Africa are generally centered on illnesses that are linked to poor hygiene. This situation appears to explain the reason researchers have in recent times focused mainly on the importance of keeping the environments where food are served clean; our homes, our schools and markets. However, as much as it is important to improve the sanitary conditions of local eateries, the awareness of the condition of such places by people who patronize them is also of great importance.

## A. Conceptualizing the Challenges of Poor Sanitary Situation of Local Eateries: A quick Review

It is estimated that over 3 million cases of acute food poisoning and 20, 000 deaths occur annually due to exposure and contamination that results from intake of food prepared in a dirty environment. Also, poor and careless handling of food items which are prepared for public consumption has remained one reason food poisoning has been on the increase.[7] Research has also shown that 200,000 people die annually from food borne pathogens. [8][9][10][11][12]; these statistics no doubt, are worrisome and consequently calls for investigation.

Food safety and hygiene according to World Health Organisation "has to do with all measures taken to protect human health from any form of harm arising from consumption of food when it is prepared and/or eaten according to intended use" Therefore, foodborne illnesses, poisoning or death may result from ingestion of food containing significant amount of pathogenic micro organisms, biological or chemical poisons that are harmful to public health [13] This situation, which has continued to pose threats to human health, seems to particularly arise from careless and poor food handling practices at any stage in the food supply chain [14][15][16]. The symptoms and severity of food borne illnesses however vary from mild disturbances, to death of the victim. [17]

Interestingly, studies have demonstrated that a wide range of food is consumed in a very large amount among the Nigerian youth; prominent among these consumers are university undergraduates, who are known to patronize local eateries conspicous around university campuses, and who have been implicated in a handful of bacteria related infections in recent times

For example, such food like jellof-rice, moi-moi, African salad (Abacha), zobo drinks, fish, meat etc are some ready-to-eat food sold within the university campuses in Nigeria and large number of these local eateries scattered in school campuses have been found to most often prepare their food under poor sanitary and unhealthy condition, consequently giving opportunity for cross contamination. [18]

Malungu [19] argues that, "food poisoning which may arise from poor sanitary condition of local eateries is a significant cause of short term and at other times, long term morbidity in most societies, especially, the developing societies" The short term consequences of food poisoning include: "hospitalization, out-of-pocket expenses, loss of productivity and death; while its long term consequences include dreadful diseases, such as cancers, birth defects and more indirect deaths" However, irrespective of the myriads of challenges identified here, these local eateries have continued to operate in a manner that keeps one doubting if there are regulations to curb their excesses.

Surprisingly, FAO [20] notes that "there are basic requirements for establishing catering businesses" They note the requirements thus:

The construction of premises walls, floors, and ceiling; lightening, ventilation and kitchen; and food preparation site handling and cleanliness; availability of washing basins/facilities, utensils; bactericidal treatment; food handlers and health hygiene, availability of refrigerators for storage of perishable foods, adequate and wholesome water supply from approved source. Adequate toilet and lavatory facilities for customers and workers; proper waste collection and disposal system (solid and liquid waste)

However, even in the face of the above provisions, Degaga [21] argues that, "disappointingly, the sanitary conditions of most local eateries are unhygienic and poor." In his study, "the challenges of local eateries in Uganda" Degaga looked at of the level of hygiene and cleanliness observed by the local eateries in Kigali; Uganda. The researcher viewed this level of hygiene observed by food centres in line with the international standard practice and observes the following:

The sanitary condition of the food catering establishment was found poor. There was poor personal hygiene practice among food handlers, inadequate and poor repair conditions facilities and more so, insufficient ventilation, lack of standard dish washing compartments and inappropriate disposal of waste. From the examined food utensils, staphylococcus aureus were isolated from 36% swabbed utensils; Escherichia Coli were isolated from 15.8% swabbed utensils. The microbiological swab test of food utensils confirmed the gross, unhygienic condition of these eateries.

Based on his finding, the study concluded "that the government and health officials whose duty it is to oversee, monitor and bring to book food establishments that fail to comply with the requirements for running an open food centre seem to show laxity in their responsibilities" The result of such careless and poor handling of environments where food are prepared and served to the public is serious outbreaks, which can lead to death or food poisoning.

China experienced this form of challenge that arise from careless food handling in 2002, when more than 200 school children were sick and 38 reported dead from the contamination of bakery with rat poison. [22] Sadly, the situation of food handling in Africa/Nigeria is also surrounded by large number of challenges, here;

there exists significant relationship between poor hygiene and environmental conditions of local eateries and outbreak of food-borne illness. It is however surprising that despite the level of frequent devastating outbreaks in Africa; the region has done little or nothing to implement surveillance systems in order to address the challenge.

## B. Hygienic Requirements and Sanitary Condition of Local Eateries: The Nigerian Experience

In many developing countries, including Nigeria, street food vendors have formed an integral part of the food supply chain. This trend, which followed the advent of urbanization contributed enormously to human and economic development. [23] There is research evidence that African countries like Nigeria, Morocco, Egypt Ghana and Kenya have shown that local food vendors and eateries form part of the economic activities in most societies and as such cannot be overlooked. [24][25]

According to Cohen and Garnet [26] "Just like in other developing countries, Nigeria as a country is confronted with a large number of challenges in the area of managing most local eateries found in almost every part of the country. These challenges raise quite a number of issues like: inadequate supervision of these local eateries, proper monitoring and enforcement of hygiene regulation by food and environmental safety officers" Even in most cases, running water is not available at these eateries, this poor sanitary state leads to a situations where customers sometimes wash their hands in buckets filled with dirty water and without soap.

In addition, Omotayo & Denloye [27] lend their voice to the above argument, when they note that "the conditions under which local eateries in Nigeria prepare and vend their food services is worsened by weak implementation of relevant environmental and public health regulations"

However, as an essential part of the National Health policy, Nigeria launched the National Policy on Food Hygiene and Safety in 2000. The essence of the Health policy Omotayo and Denloye note "was to monitor the regulation and strict compliance to laws guiding the establishment of local catering establishments" This control and regulation is mainly carried out at the local government level, where health officers enforce relevant sections of public health laws.[28] Commenting on the extent that the government tries to ensure regulation and maintenance of sanitary conditions through official laws and regulations, Omotayo and Denloye, write:

In some cases the local government develops bye laws which apply specifically to the regulation and control of food premises. The laws enacted to ensure food safety and environmental hygiene in Nigeria include: The Public Health Law Ordinance, Cap 164, (1917-1958), Standard Organisation of Nigeria (SON) Decree 1971, The Food and Drug decree number 35 (1974). The animal Disease and Control Decree number 10 (1988), etc.

Against the above argument, Odeh, Omoruyi & Nwogu [29] wonders why these local eateries remain the way they are, irrespective of the plethora of laws provided by the authorities to address the challenges. They however argue that "there is a need to revise some of the existing food safety legislation, as some of them are out of date and lost relevance - they do not again meet current realities.

Because of the of the large number of students in universities and the "on the move" nature of students, this creates an appropriate environment for local eateries to thrive, but unfortunately, these eateries operate under unsanitary conditions [30][31]. Research evidence abound that studying food handlers and their premises or environment could determine hygiene knowledge and practice towards prevention of food born and food related diseases Ehiria & Morris 1996).

## C. The Sanitary Condition of Local Eateries in Nigerian Universities: An Appraisal

According to the World Health Organisation (WHO), "sanitation generally refers to the provision of facilities and services for safe disposal of unwanted materials; it also refers to the maintenance of hygienic conditions. Inadequate sanitation is a major cause of disease worldwide and improving sanitation is known to have a significant benefit on health, this is both in households and communities. One of the areas that the importance of sanitation cannot be overestimated is the food and service industry, interestingly; this sector has continued to grow in Nigeria and other parts of the developing world due to its economically strategic position (Abogan 2014, Ihenkoronye 2015). Furthermore, the ever-present nature of food services in Nigerian universities point to the fact that these local food services occupy a relevant position even in the universities. One question that comes to mind at this point is, to what extent do these local eateries which serve more than 65% of the student population maintain a standard sanitary condition?

## D. Evaluating the Sanitary Condition of Local Eateries in Nigerian Universities: Hazard Analysis

Local eateries in tertiary institutions serve a variety of local food items, which are not only appreciated for their unique flavour, but convenience and the role they play in the cultural, social heritage of societies, they also have become important and essential for maintaining the nutritional status of students populations.[32][33] Besides offering business opportunities for developing entrepreneurs, the establishment of local eateries can also make sizeable contribution to the economies of countries, especially the developing ones.

Irrespective of these advantages, local eateries, especially, the ones that do not attach importance to sanitation and food safety are perceived to be major public health risk. There are research evidences that

street food contribute to a significant number of food poisoning,[34][35]

According to Bryn [36], "street food was responsible for 691 food poisoning and 49 deaths from 1983-1992 in Shandong province of China" Food borne bacteria pathogens commonly detected in local eatery food are *Bacillus Cereus, Clostridium Perfrigens, Staphylococcus aureus and Semolina specie.* [37]

In addition, these eateries congregate in overcrowded areas where there are high numbers of potential customers which provide limited access to basic sanitary facilities. Hence the contamination of food is often linked to the waste generated by food processing. More so, the lack of facilities for liquid drainage and waste water and garbage disposal encourages waste to be thrown into nearby street and gutters; such areas act as habitats for rodents, breeding points for flies, and media for growth of micro organisms. [38]

In Africa, studies have shown that 85% of food items like roast fish, moimoi, jollof rice, oil bean salad, roast maize prepared in local eateries are usually prepared in unhygienic environments given that garbage and dirty waste are conspicuously close to the stalls. These garbage accumulates and provide harbourage to insects and animals that are linked to disease transmissions. [39][40]

The effect of such poor and unhygienic environment is that students who patronize such places have the higher risk of being affected by such sicknesses like Lassa fever, or being exposed to diseases that are transmitted through such pests and animals.

Furthermore, water has been described as a critical raw material in many street vended operations. Contaminated water however, can create a public health risk when it is used for drinking, washing of food, incorporated in the food as an ingredient and used in processing of food or used for washing equipment, utensils and hands.

Studies carried out in different regions of Asia, Africa and South America have frequently pointed to unavailability of potable water for various activities at local eateries. Due to shortage of clean water, many local joints tend to re-use the water, especially for cleaning utensils and used dishes. [41]

Furthermore, studies conducted in bacteriology and quality of water used by some street vendors reveal frequent contamination with coliform bacteria; this situation no doubt exposes the undergraduate students of universities in the south east, who patronize these local eateries to the hazard of being contaminated by such bacteria.

In addition the use of proper utensils and storage of prepared food is often critical to the safety of street food. Poor quality of materials coupled with improper practices which local eateries have been identified with may lead to toxin formation, pathogen growth and re-contamination. This may then lead to

collection of food residue, facilitating microbial growth, which leads to increased likelihood of contamination (Chapman, Evarsely, Maclaurin, & Powell 2010). [42]

Sadly enough, this poses a threat to the environment where these foods are served. More so, most of the food handlers in local eateries may introduce biological hazards by cross contamination after handling raw materials when they suffer from specific diseases and physical hazards by careless food handling practices .[43]

#### V. METHOD

In this study, we adopted the survey method. This method was considered appropriate in the execution of this study because it lends itself to the study of samples from a larger population.

## A. The Population of Study

The population of the study included all the undergraduate students in all the government-owned universities in the Southeastern part of Nigeria. This population is about 315,180 students. The universities include the following: Abia State University Uturu, Chukwuemeka Odemegwu Ojukwu University Uli, Anambra State, Ebonyi State University, Abakiliki, Enugu State University of Science and Technology, Enugu, Imo State University Owerri, Michael Okpara University of Agriculture Umudike, Nnamdi Azikiwe University Awka, Federal University of Technology Owerri, Imo State, Federal University Ndufu Alike Ikwo Ebonyi State and University of Nigeria Nsukka.

## B. Sample and Sampling Procedure

A study sample of 400 was drawn from the population of study. This sample size had been determined for this study by using Taro Yamane's formula for determining sample size:  $n=N/(1+N[e]^2)$  Based on the above result, the sample of 399 was considered appropriate for a 5 percent error tolerance. However, we approximated this figure to 400 which was adopted as the sample size.

Multistage sampling procedure was used in this study. The first stage involved the selection of universities. All the five South-eastern states have both state and federal universities. Two federal universities and two State Universities were randomly selected from among the states. University of Nigeria, Nsukka (Enugu State) and Nnamdi Azikiwe University Awka, Anambra State were selected for the federal Universities, while Imo State University and Ebonyi State Universities were chosen from the State Universities.

The second stage involved selecting the faculties from the various institutions that had been chosen. Two faculties were randomly selected from each of the institutions. For the Federal Universities, University of Nigeria, Nsukka (UNN) had the faculties of Arts and Engineering selected, while

Nnamdi Azikiwe University, Awka (NAU) had Faculty of Social Sciences and Education selected. In the State Universities, the Faculty of Agriculture and Natural and Applied Sciences were chosen from Imo State University (IMSU), while Law and Medical Sciences were chosen from Ebonyi State University Abakiliki (EBSU).

The third stage involved the random selection of one department from each of these faculties that were chosen. The Faculty of Arts (UNN) had the Department of Music selected, while the Faculty of Engineering had the Department of Mechanical Engineering selected. Nnamdi Azikiwe University Awka (NAU) had the Department of Mass Communication chosen from Social Sciences and from Education the Department of Guidance Counseling chosen. For the State Universities, the Department of Rural Sociology and Industrial Chemistry were selected from Imo State University (IMSU), Owerri, while for Ebonyi state University the two departments that emerged were, for Law Faculty, Department of Civil Law and for Faculty of Medical Sciences, Department of Community Medicine was chosen.

At the fourth stage, fifty students were selected from each of the departments from each of the eight departments used in this study giving a total of 400 students. They were the people had the questionnaire administered to them.

## C. Instrument of Data Collection

The questionnaire was used as the instrument of data collection. The questions comprised entirely closed ended questions.

#### VI. RESULTS

The data analysed in the demographic section showed that 60 % (260) of the respondents are males, while 40% (140) are females. The data also indicated that the distribution of the male respondents was a little higher than that of their female counterpart. Respondents that fell between the age categories of 16-21 years were 35%; the ones that fell within the age range of 22-27 were 50%; the ones that fell between the ages of 28-32 were 35%. The data demonstrated that the ages of 22-27 were the highest in age distribution.

Research Question One: What proportion of students in the south-east is aware of the sanitary condition of local eateries on campus?

TABLE 1
Awareness of students to sanitary conditions of eateries

|   | Response            | Frequency | Perc entage |
|---|---------------------|-----------|-------------|
| Awareness of students to<br>sanitary conditions of<br>eateries        |                     |           |             |
| Do you live in school?  | YES                 | 280       | 70%         |
|   | NO                  | 120       | 30%         |
|   | TOTAL               | 400       | 100%        |
| Do you patronize local eateries?                                      | YES                 | 250       | 68.5%       |
|   | NO                  | 150       | 31.6%       |
|   | TOTAL               | 400       | 100%        |
|   | •                   |           |             |
| How of ten you patronize local eateries?                              | DAILY               | 280       | 70%         |
|   | ONCE IN TWO<br>DAYS | 80        | 20%         |
|   | NOT AT ALL          | 40        | 10%         |
|   | TOTAL               | 400       | 100%        |
| Are the local eateries you patronize hygienic?                        | YES                 | 163       | 40.8%       |
|   | NO                  | 237       | 59.2%       |
|   | TOTAL               | 400       | 100%        |
| Awareness of food safety<br>and hygiene practices of<br>food handlers | YES                 | 290       | 80.5%       |
|   | NO                  | 110       | 19.4%       |
|   | TOTAL               | 400       | 100%        |
| Awareness of general<br>sanitary condition of local<br>eateries       | YES                 | 280       | 70%         |
|   | NO                  | 120       | 30%         |
|   | TOTAL               | 400       | 100%        |

Table one above shows that 70% (280) of the respondents live in the school environment, while 30% (120) of them don't. Furthermore, the data showed that 68.5% (250) of the respondents patronize local eateries in south eastern universities, while 31.6 of them don't. Again, a greater percentage (70%) of the respondents said they patronize the local eateries in school daily; 20% of them said they patronize these eateries only two times in a week, while 10% said that they don't patronize local eateries in schools. Again, 163% of the respondents said that the local eateries they patronize are in good and hygienic environments, while a higher number (59.2%) among them said that they are not. Similarly, 80.5% of the respondents said that they were aware of the food hygiene and safety practices that the food handlers are expected to have, 19.5 of them said that they were not. Furthermore, 70% of the respondents said that they were aware of the sanitary condition of local eateries in south-eastern universities, while only 30% of them said that they were not aware. Based on the data gathered here, the answer to the first research question is that a significant proportion of the students in the south-eastern universities are aware of the sanitary conditions of local eateries in their area.

Research Question Two: What is the Assessment of these Students of the Sanitary Conditions of Local Eateries around universities in the South-East?

TABLE 2 Students' Assessment of sanitary condition of local eateries on campus

| Students' Assessment of<br>Sanitary Condition of<br>Local Eateries in<br>Campus   | Response        | Frequency | Perc entage |
|---|-----------------|-----------|-------------|
| Do you appraise the sanitary condition of local eateries in school?   | YES             | 323       | 80.8%       |
|   | NO              | 77        | 19.2%       |
|   | TOTAL           | 400       | 100%        |
| Would you say that the foods handlers who serve you in local eateries are neat in their appearance?   | YES             | 317       | 79.2%       |
|   | NO              | 83        | 20.8%       |
|   | TOTAL           | 400       | 100         |
| Do you assess the food<br>handler's hygiene and<br>safety practices at the local<br>eateries?   | YES             | 317       | 79.2%       |
|   | NO              | 83        | 20.6%       |
|   | TOTAL           | 400       | 100         |
|   |                 | •         |             |
| How of ten do you assess<br>this  | ALWAYS          | 320       | 80%         |
|   | ONCE IN A WHILE | 80        | 20%         |
|   | NOT AT ALL      | -         | -           |
|   | TOTAL           | 400       | 100%        |
| Do you take your time to<br>watch if these eateries<br>place importance on such<br>practices like hand<br>washing, keeping clean<br>environment etc | YES             | 323       | 80.8%       |
|   | NO              | 77        | 19.2%       |
|   | TOTAL           | 400       | 100%        |

Data in Table two above shows that a greater percentage (80.2%) of the respondents appraised the sanitary condition of local eateries in school, while 19.2% of them did not. Again, 79.2% of the respondents said that the food handlers who serve them in local eateries were neat, while 20.8% said they were not. In addition, 79% of the respondents said they assessed the food handler's hygiene practices at the local eateries, while 20.6% said that they did not. About 80.8% of the respondents said they assessed these practices always, while 20% of them said they assessed them once in a while. Also, 80.8% of the respondents said they take time to watch whether the eateries placed importance on food and hygiene practices like hand washing, cleaning of environment etc, while only 19.2% indicated otherwise. It was against the foregoing that the researcher concluded that the local eateries in eastern universities are perceived as fairly in hygienic conditions.

<u>Research Question Three:</u> What is the attitude of these students to the sanitary condition of the local eateries on their campuses?

TABLE 3
Attitude of students to local eateries on their campuses

| Attitude of students to<br>local eateries in their<br>environment  | Response | Frequency | Percentage |
|--|----------|-----------|------------|
| Are you mindful of<br>hygienic conditions at<br>local eateries?  | YES      | 43        | 10.8%      |
|  | NO       | 357       | 89.2%      |
|  | TOTAL    | 400       | 100%       |
| Does the environment of<br>these local eateries affect<br>your decision of what<br>eatery you patronize? | YES      | 160       | 40%        |
|  | NO       | 240       | 60%        |
|  | TOTAL    | 400       | 100        |
|  |          |           |            |
| Does your knowledge of<br>food hygiene affect your<br>decision of where you<br>patronize                 | YES      | 200       | 50%        |
|  | NO       | 200       | 50%        |
|  | TOTAL    | 400       | 100        |
| How of en do you pay attention to condition of local eateries?   | ALWAYS   | 197       | 49.2%      |
|  | RARELY   | 203       | 50.8%      |
|  | NOT ALL  | -<br>400  | -<br>100%  |
|  | I        | 400       | 10070      |

The data in Table three shows that a lesser percentage of the students (10.8%) were mindful of the hygienic conditions of the local eateries they patronize; 89.2% of them were not. Furthermore, 40% of the respondents noted that the environment of the local eateries they patronize affects their decision of which eatery they patronize, while 60% it did not. Again, 50% of the respondents said their knowledge of food hygiene affected their decision of which eatery they patronized, while another 50% said that it did not affect them. Finally, 49.2% of the respondents said they often paid attention to the condition of the local eateries, while 50.8% said that they did not.

Based on the data gathered here the answer to our research question is that the students have careless attitude towards the sanitary condition of local eateries on their campuses.

### A. Discussion Findings

Findings of the study reveal that a significant proportion of the students in Nigeria's south-eastern universities are aware of the sanitary conditions of local eateries in their various campuses. What this presupposes is that a greater percentage of the students of universities in the south-eastern part of Nigeria are aware of the sanitary condition of local eateries. Neme et al. [2] also have a similar finding in a descriptive cross sectional study to assess the sanitary condition of food handling practice of restaurants in Jimma town for implication of food borne diseases; out of 75 restaurants registered in the town, 65% were randomly selected and this study showed that about 86.5 % of the students who

patronized the restaurants were aware of the conditions of the local eateries they patronized.

The second research question surprisingly revealed that the local eateries in south eastern universities were in fairly good hygenic condition. This was against the already held notion that some of these eateries were not actually in a hygienic condition.

However, Okojie & Isah [23] are in line with this finding. They note, "The local eateries which were studied in the south-south part of Nigeria revealed that they were in fairly good condition. What the above study tries to throw light to is the fact that some of these local eateries irrespective of the way that they have been perceived in the past are sometimes in good condition. This might explain why the patronage of these joints is growing among the students.

The third finding showed that the students have a careless attitude towards the sanitary condition of local eateries on their campuses. This finding sheds light on the fact that a large number of university undergraduates who patronize a large number of the local eateries scattered on university campuses have careless attitude towards the sanitary condition of most of these eateries.

#### VII. CONCLUSION

The importance of health cannot be over emphasized in any society. One of the areas of human challenge is that of health, surprisingly studies have shown that sometimes the way we handle our health or what helps keep us healthy is not encouraging. Local eateries are scattered everywhere on the university campuses and students patronize them even when such eateries are identified to be in poor sanitary conditions.

This study investigated the students who usually patronize these local eateries with the view of finding out the extent these students were aware of the sanitary conditions of these local eateries, their perception of these local eateries and their attitude towards them.

Surprisingly, the study discovered that despite the fact that these students were aware of the conditions of these local eateries, they still have very careless attitude towards them.

### RECOMMENDATIONS

The following recommendations were made based on the findings of the study:

The food hygiene procedure and practices in local eateries should be improved for the local eatery operators, when this is done, there is no doubt that it will correspondingly reduce the risk of food related illnesses.

In order to do this, therefore, there should be guidelines for establishment of these eateries; these guidelines should factor in such areas like

environmental hygiene of the place where food is prepared.

The environmental health officers, health educators and community health workers must ensure that food service centres are inspected and food handlers properly educated on key principles of food hygiene and safety.

University authorities have to set a standard that will guide local eateries; organize workshop for them so that appropriate hygiene practices will be expected from them.

The university authorities should also educate students on the importance of appropriate food hygiene practices. This will help them to be informed on safety and hygiene practices.

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