Examining the Role of Management in Upholding Food Safety Standards in Unclassified Restaurants within Nairobi City County

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Abstract

Restaurants provide food to millions of people away from home. However, the provision of safe food in most unclassified restaurants, particularly in Nairobi City County, is a problem. This study aimed to establish the role of management in ensuring that safety standards are met for safe food provision by unclassified restaurants in Nairobi City County. A descriptive survey design was employed as the blueprint to guide the study. The study population consisted of 124 unclassified restaurants in Nairobi's Central Business District. Data collection involved questionnaires, in-depth interview guides, and observation checklists. Questionnaires were administered to supervisors, cooks, and waiters, while interview schedules were conducted with restaurant managers. Quantitative data were analyzed using means, standard deviations, inferential models, and presented in tables and figures. A t-test was used to determine if there is a significant difference between unclassified restaurants that observe specific food safety management practices and those that do not. The chi-square test, as one of the inferential statistics, was employed to determine the association between food handling practices, food hygiene training, food legislation compliance, and the role of management in applying safe food provisions. Qualitative results were presented in tables and triangulated with quantitative results. The study found that the role of management and safe food provision by unclassified restaurants have a significant association ($\chi2=11.107$, p value=.001 < .05). This paper concludes that the role of management impacts the safe food provision by unclassified restaurants. The study recommends that the management of unclassified restaurants implement existing food safety guidelines and procedures. Additionally, restaurant management should work closely with employees to enhance safe food provisions in the hotel industry.

Keywords: *Management, food safety standards, unclassified restaurants, safe food provision, regulatory compliance, Nairobi City County*

1.1 Introduction

Restaurants refer to food outlets offering food and drinks to customers designated areas. Restaurants provide food to millions of people away from home. However, provision of safe food in most of unclassified restaurants particularly in Nairobi City County (NCC) is a problem. Most unclassified restaurants lack clear guidelines on food safety management practices rendering safety of food served to customers questionable. Moreover, food safety remains a major concern facing the food sector worldwide (Food and Agriculture Organization [FAO], 2018). Food management practices that include handling practices, food hygiene training, legislation compliance procedures and the role of management play a significant part in food safety provision (Riggio, Wang, Kniel, & Gibson, 2019). Training related to food safety including food safety training and legal issues enhances awareness related to food issues (Seaman, 2010). Although contamination of food can happen at any place of the chain of production, personnel dealing with food play a very important role in making sure that food safety all through the production of food and chain of storage by sticking to hygienic activities related to food handling and good personal hygiene (Odundo, Okemo & Chege, 2018). WHO highlights the basic procedures of handling food to make sure that the food provided is not harmful? It provides procedures of ensuring that food remain safe and include cooking, keeping food clean and separating raw and cooked to the correct internal temperatures, keeping food at safe temperatures; and applying raw materials that are portable (Jeinie, Sharif, Saad & Nor, 2016).

In developing countries of Asia and Africa, provision of safe food remains a major problem in most of the countries. In Asia region, lack of hygiene and sanitation and low awareness of good food management practices is a threat to food safety and a major cause of food-borne diseases (FAO, 2018). In Bangladesh, despite food safety being a priority issue to the government to attain the national goals of food and nutrition security, provision of safe food in various food premises and home remain a major problem (FAO, 2018). Nonetheless, South Korea, Israel, Japan and Singapore rank top in terms of quality and safety of food in Asia (Mahmoud, 2019). In Kenya, provision of sufficient and safe food is one of Kenya's Big 4 Agenda and Vision 2030. However, Kenya still ranks lower at 87th in terms of food safety and quality according to Global Food Security Index (2018). Kenya scored 45.8% in terms of food quality and safety ranking behind Tunisia 61.9%, South Africa 58.7% and Egypt 56.7% (Global Food Security Index, 2018). In Nairobi City County, most food provision outlets, hotels and restaurants lack or do not follow clear food safety guidelines (Mwangi, 2018). According Malavi, Abong and Muzhingi (2017) many restaurants fail to observe food safety regulations and proper food handling procedures. As a result, cases of food illness resulting from consumption of unsafe food and water are a major problem among restaurants in Nairobi CBD (WHO, 2018).

1.2 Statement of the Problem

Hygiene is described by three aspects and includes food, staff and environment. However, highest levels of hygiene practices are not attained by most hotel outlets as recommended by various food legislation bodies and practices, including WHO, HACCP and DPH Kenya. Ideally, food consumed in restaurants should be impeccable observing high safety standards and handling procedures. Maintaining safe food starts at the farm where it is produced, transported in safe couriers, stored in safe environment with proper range of temperatures, cooked in clean environment, handled and served in clean utensils. Moreover, the persons handling food and

serving to the customers must observe highest level of food safety guidelines that include wearing clean protective clothing including apron and garments at the beginning of each shift and changing them regularly when necessary.

Most unclassified restaurants may not have appropriate uniforms for staff, a place set aside for staff to take a shower and change in to clean uniform when need be, and may have undergone minimum food safety training or none at all. It for these reasons that this research was carried out in order to bring awareness to the unclassified restaurant management on what is exactly expected and required of them in order to provide safe food. However, the provision of safe food in most unclassified restaurants in Nairobi City County remains a problem. Most restaurants lack clean food management facilities adequate such as food storage facilities, food preparation and production facilities such as colour coded chopping boards, and food servicing trays (WHO, 2015; Kenya Hotel Industry, 2019). Tourism regulatory Authority is responsible for classifying hotels in Kenya. The classification of restaurants as classified or unclassified is based on quality of hotel service deliveries. Following the huge numbers of customers served, service utensils in most cases are inadequate hence replenishing clean service utensils and equipment as fast as required is a challenge posing a high risk of re-using plates and spoons without washing with clean hot detergent water as recommended by food hygiene practices (Perez & Manzano, 2017). Most of the food production and service brigade may lack or have very little knowledge on food safety from the most junior to senior staff (Kenya Hotel Industry report, 2019). More emphasis is put on mass production without none or little attention to the conditions under which food is prepared and served (Amoke, 2014).

1.3 Research Objective

To establish the role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants in Nairobi City County.

1.4 Research hypothesis

H_o: There is no significant relationship between management role and safe food provisions by unclassified restaurants in Nairobi City County.

1.5 Significance of the Study

The research is helpful to unclassified restaurants by shedding light on critical hygiene issues that need to be observed during routine checks. The study is important for consumers by raising awareness of the risks involved in consuming food from any outlet without ensuring basic food safety standards are met. This study will educate food handlers on food hygiene and safety practices, as failing to do so can not only harm consumers but also lead to loss of business for caterers whose food is contaminated. The consequences can be severe, even affecting lives. For scholars, this research sheds light on how different organizations collaborate to implement food safety measures, highlights the seriousness of failing to follow safety rules, and demonstrates how the hospitality industry can contribute to the government's Big Four Agenda and Vision 2030. The study is significant to the government of Kenya as it informs their Big Four Agenda on providing adequate and safe food for the Kenyan people.

1.6 Conceptual Framework

The Figure 1 provides the conceptual interconnection between management as independent variable and safe food provision (dependent variable).
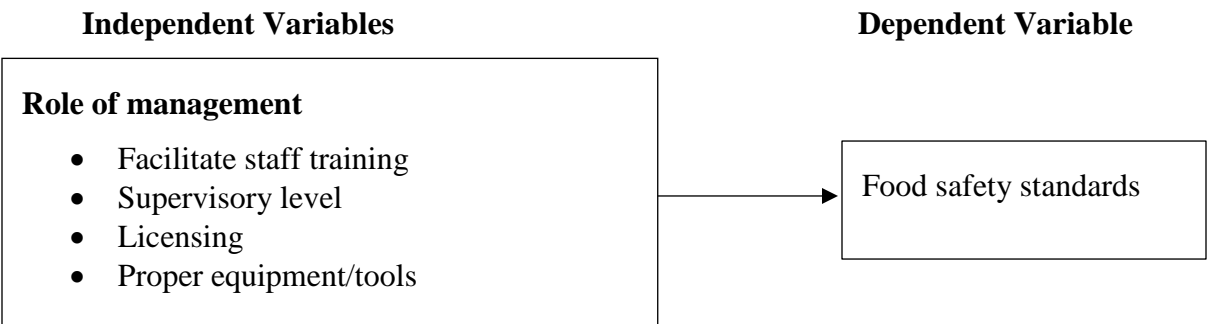
Independent Variables   **Dependent Variable**

Role of management

- Facilitate staff training
- Supervisory level
- Licensing
- Proper equipment/tools

→ Food safety standards

Figure 1: Conceptual Framework

1.7 Theoretical Review

The research was guided by HACCP Framework. Hazard Evaluation and Critical Control Factor (HACCP) is a tool of monitoring made use of in many food service establishments to examine food security globally (McClusky, 2004). The HACCP system assists drivers of food businesses take a look at just how food is dealt with and also presents treatments to make food produced is safe to eat. HACCP-based food security programs have actually been approved and put in place as an effective means of dealing with risks associated with food safety (Soman & Raman, 2016). Hazard evaluation is important to any type of food safety monitoring system, because performing a threat analysis aids in arranging the understanding called for to develop an effective mix of control measures.

2.1 Food management practices and safe food provision

Safety of food management practices include a number of routines that could be followed by food handlers in order to keep food safe by preventing contamination (Payne-Palacio & Monica Theis, 2011). Making certain food security monitoring requires recognizing every potential risk within a food service procedure and taking correct procedures to avoid them food contamination (Zayed, 2017). Mohamady et al. (2012) recommended a food safety administration structure based upon codex alimentarius by FAO as well as WHO concerning worldwide applicable food security monitoring requirements at various phases of management of food security. In Kenya, food handlers are tasted and given a medical health certificate only if found fit to work in a food production workshop.

2.2 Safe food provision

Safe food provision according to HACCP framework entails activities of making sure that foods cause no harm to the customer (Admasu & Kelbessa, 2018). According to HACCP framework, provision of safe food entails protection of the food supply from unsafe contamination, prevention of the development and spread of unsafe contamination as well as removal of contaminants and contamination effectively (Ghezzi, 2017). Safe food provision calls for proper preparation, handling and storage of food means that avert diseases that are food-borne. According to WHO (2015) safe food provision food need to observe five key principles of food hygiene that include:

Stratford Peer Reviewed Journals and Book Publishing
Journal of Hospitality and Tourism Management
Volume 7||Issue 1||Page 12-22 ||January||2024|
Email: info@stratfordjournals.org ISSN: 2706-6592

separate raw and cooked; keep clean as well as cook well, keep food at temperature that are safe; use safe raw materials and water.

2.3 Empirical Review

Management factors, supervision and enforcement of FSM rules by food outlet management and physical environment of the kitchen are important in allowing people handling food to regulate food safety according to a study exploring the determinants of safety of food management in chosen hotels in Eldoret Town, Kenya (Onyango, 2016). The research used both the explanatory research designs and descriptive. However, the study did not illustrate the role of management in enhancing food safety. Management must be alert in making sure that conformity with activities that protect health of the public given that department of health inspections of restaurants of fast-food may not be enough to make sure that there is compliance with safety of food and regulations, according to studies done on Food Safety in Fast Food Restaurants, (Dundes & Swann, 2018). Nyamari (2013) evaluated conformity to food safety standards among food trainers in chosen hospitals in Kenya. This research utilized a quasi-experimental study style. The following were recognized in all FGDs; absence of food security training, poor working conditions, fast turn over, lack of sufficient equipment, absence of water, absence of acknowledgment by the health center administration and insufficient supervision as the significant barriers influencing non-compliance to food security criteria. Ndu and Asiegbu (2021) conducted a study on Food hygiene management and safe food production in Port Harcourt. The cross-sectional research of the quasi-experimental design was taken advantage of to gather the info. The results revealed that the measurements of food health surveillance had considerable as well as strong straight connection with safe food production.

3.0 Research Methodology

The study applied a descriptive survey design to determine the influence of food management practices on safe food provision by 124 unclassified restaurants in Nairobi City County. Using stratified random sampling, a sample size of 189 participants was determined including restaurant managers, supervisors, cooks and waiters. Data collection was done over 3 weeks using self-administered questionnaires for the staff, face-to-face interviews with 21 managers, and an observation checklist. Quantitative data was analyzed in SPSS using descriptive and inferential statistics like t-tests and chi-square tests; qualitative data underwent content analysis. The quantitative and qualitative results were triangulated. Hypothesis testing was done using p-values at the 0.05 significance level.

4.0 Results and Discussions

The number of questionnaires distributed to restaurants' employees was 189. A total of 157 questionnaires were retuned, yielding a response arte of 83.1 percent. Demographic information revealed that majority (62%) of workers in the hotel industry were females. The study found that most (35%) of the respondents were aged 26-30 years. It was also established that 21% were aged 21-25 years. Moreover, most (45.2%) of the respondents had attained diploma educational qualification. The study established that majority (33.8%) of the restaurant workers have been working for 4-5 years.

4.1 Descriptive analysis

The study sought to establish the role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants. The participants' opinions are captured in Table 1.

Table 1: Role of management in the provision of safe food in the restaurant

Role of management	No		Yes	
	f	%	f	%
The management of this restaurant periodically organizes food safety training programmes in conjunction with industry experts for their staff	95	60.5%	62	39.5%
The management of this restaurant is committed enforcing food safety policies, guidelines and procedures	74	47.1%	83	52.9%
The management of this restaurant ensured that food preparation, and production, storage are in line with food safety standards stipulated in HACCP framework	85	54.1%	72	45.9%
Hotel supervisors are actively involved in supervisory tasks of ensuring that waiters and chefs observe food safety guidelines	71	48.4%	81	51.6%
The management periodically liaises with food safety and regulatory bodies for renewed licensing	91	58.0%	66	42.0%
The management procures safety equipment for their employees in time	91	58.0%	66	42.0%
Staff have the needed equipment and or tools to follow food safety procedures	89	56.7%	68	43.3%

Majority 60.5% of restaurants did not periodically organize food safety training programmes in conjunction with industry experts for their staff. Only 39.5% of the management of the restaurants periodically organizes food safety training programmes. Most of the restaurants 52.9% were committed enforcing food safety policies, guidelines and procedures while 47.1% were not committed enforcing food safety policies, guidelines and procedures. It was also established that 45.9% of restaurants management ensured that food preparation, and production, storage are in line with food safety standards stipulated in HACCP framework while 54.1% did not. Plate 5.4

Further, 51.6% of the respondents indicated that hotel supervisors are actively involved in supervisory tasks of ensuring that waiters and chefs observe food safety guidelines while 48.4% indicated that hotel supervisors are not actively involved in supervisory tasks of ensuring that waiters and chefs observe food safety guidelines. The study established that most of restaurants managements did not periodically liaises with food safety and regulatory bodies for renewed licensing and that the management procures safety equipment for their employees in time. It was also established that the most staff did not have the needed equipment and or tools to follow food safety procedures. Observation Checklist in table 4.13 shows the observation checklist results regarding role of management.

Table 2: Observation Checklist: Role of management

Role of management items	Not available Count	Available Count
Distinct department for training staff on food handling practices	57.3%	42.7%
Organizational structure describing authority and functions	55.6%	44.4%
Problem/event escalation procedures	58.1%	41.9%
Distinct section for procuring food stuff from accredited suppliers/supply reports	62.9%	37.1%
Section for procuring hotel facilities/equipment	58.9%	41.1%
Daily task allocation of staff (observing)	59.7%	40.3%
Clear objectives set by leaners concerning hygiene and food safety	58.1%	41.9%

The observation checklist above indicates that most of the roles of management items were unavailable in most hotel restaurants. It was observed that distinct department for training staff on food handling practices, organizational structure describing authority and functions, problem/event escalation procedures, distinct section for procuring food stuff from accredited suppliers/supply reports, section for procuring hotel facilities/equipment, daily task allocation of staff (observing) and clear objectives set by leaners concerning hygiene and food safety were not available in most unclassified restaurants. In an interview session with restaurant managers, KII 1 also said:

"...*The management play significant role in organizing food safety training events, acquisition* of *food safety equipment, dress code for hotel workers and implementation of food safety guidelines".* [KII 1, 2021]

KII 2 also said:

"...The *management play has noble role in promoting safe food provisions in the hotel. However, in our hotel the management seems to neglect this role as there are no food safety training programmes and dress codes are not renewed timely for hotel workers".* [KII 2, 2021]

4.2 Relationship between Role of management and safe food provision by unclassified restaurants

Chi square test was employed to determine the role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants in Nairobi City County. The hypothesis was checked utilizing p worth calculated. The acceptance/rejection criterion is that, if the p worth > 0.05, we do not reject the H4< 0.05, the Ho is rejected. The null hypothesis (H4) was that there is no substantial partnership in between management role and safe food provisions by unclassified restaurants in Nairobi City County. Table 3 shows the Chi square test regarding the association between management role and safe food provision by unclassified restaurants.

Table 3: Cross tabulation between management role and safe food provision by unclassified restaurants

		Safe food provision by unclassified restaurants		
		No	Yes	Total
Role of management	No	30	37	67
	Yes	18	72	90
Total		48	109	157
	(χ)	11.107		
Chi-square	P-value	.001		

The study found that role of management and safe food provisions by unclassified restaurants have a significant association. The influence of role of management on safe food provision by unclassified restaurants was statistically significant as supported by a chi square of 11.107 and a reported p value of .001<0.05. The results imply that role of management influences safe food provision by unclassified restaurants. The t-test results also indicated that role of management had a positive and significant association with safe food provision by unclassified restaurants (.026<0.05). The results imply that restaurant management play significant role in the provision of safe food by unclassified restaurants. Restaurants provide food to millions of people away from home. However, provision of safe food in most of unclassified restaurants particularly in Nairobi City County is a problem. Most unclassified restaurants lack clear guidelines on food safety management practices rendering safety of food served to customers questionable. Besides, these restaurants lack proper facilities to enhance food safety which include food storage facilities, appropriate food preparation and production equipment and service tools. In the ideal situation, food consumed in restaurants need to be impeccable observing high safety standards and handling procedures as prescribed by restaurant management and food safety regulations.

4.3 Hypothesis testing for Role of Management in the Provision of safe food in the restaurant

By utilizing the results in table 3, a null hypothesis was tested that:

H_{o4}: There is no significant relationship between management role and safe food provisions by unclassified restaurants in Nairobi City County.

The p value calculated was .001<0.05. The results thus imply that role of management significantly influences safe food provision by unclassified restaurants. The null hypothesis was rejected and alternative hypothesis accepted that there is significant relationship between role of management and safe food provision by unclassified restaurants.

Discussion

The study sought to establish the role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants in Nairobi City County. It was established that role of management and safe food provision by unclassified restaurants have a significant association as supported by a chi square of 11.107 and a reported p value of .001<0.05. The null hypothesis was rejected and alternative hypothesis accepted that there is significant relationship between food legislation compliance and safe food provision by unclassified restaurants. The results imply that role of management influences safe food provision by unclassified restaurants.

5.0 Conclusion

The role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants is essential. Food handlers are not able to apply the appropriate food safety behaviors in the lack of sufficient administration assistance. The arrangement of centers such as sufficient and also comfortably located hand laundry basins is a management function and findings recommend that, as a priority, management must make sure that they are not adding to the absence of execution of the appropriate food safety behaviors of food handlers as a result of falling short to provide the essential resources. The management play significant role in organizing food safety training events, acquisition of food safety equipment, dress code for hotel workers and implementation of food safety guidelines. The study thus concludes restaurant management carries the task of ensuring that workers comply with food safety regulations and necessary facilities that help enhance the provision of safe food in hotels are provided.

6.0 Recommendations for Policy and Practice

The role of management in ensuring that safety standards are achieved on safe food provision by unclassified restaurants is essential. Management plays an effective role in facilitating food safety management systems. Restaurant management carries great responsibility in enhancing food safety in the hotel industry. There is need for restaurant management to work closely with restaurant employees with aim of enhancing safe food provisions in the hotel industry. There must be constant helpful guidance to elevate the skills of food handlers to adhere to far better food hygiene technique. A robust food safety and also food hygiene training programme for all degrees of the organisation is necessary in making sure adequate expertise of food security dangers and also correct practices. There is need for food authorities to enhance the assessment of restaurants to ensure that there are in compliance with acceptable food safety standard. The government may strengthen her bodies in charge of food safety including DPH in the Ministry of Public Health by compelling them to conduct periodic assessment of restaurants so as to ensure that food standards of food safety are observed.

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