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Knowledge, Attitude, and Practice Regarding Food Hygiene Standards among Somali-Owned Restaurants in Kansanga, Uganda

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Abstract

Food hygiene standards are critical for preventing foodborne illnesses, yet gaps in knowledge, attitude, and practices (KAP) among restaurant staff pose significant public health risks. This study assessed the KAP levels regarding food hygiene among staff in Somali-owned restaurants in Kansanga, Uganda. A descriptive cross-sectional design was employed, with data collected from 109 staff members via questionnaires and direct observations. Stratified random sampling ensured representation across restaurant sizes, and data was analyzed by using SPSS version 20. Key findings revealed low knowledge level, with only 36% of staff recognizing hygiene's role in illness prevention, attitudes level were inconsistent, as 41% valued customer safety, and practices level were inadequate, with handwashing (30%). Major challenges included insufficient training, substandard infrastructure, operational pressures, and weak regulatory oversight. The study concludes that the significant deficiencies in food hygiene standards within Somali-owned restaurants in Kansanga, Uganda. Insufficient knowledge of safe food handling practices, inconsistent attitudes toward hygiene, and poor adherence to basic protocols. The study recommended that training programs, infrastructure improvements, and community engagement.

Keywords: Food hygiene, knowledge, attitude, practices, Somali-owned restaurants, Uganda, food safety

1.0 Introduction

Food hygiene standards are crucial in ensuring that food served to the public is safe for consumption (Singh, & Puniya, 2024). According to WHO, 2022 reported that the poor food hygiene practices in restaurants can lead to the spread of foodborne diseases, which are a significant public health issue

globally (Todd, 2020). In Africa, foodborne illnesses account for an estimated 137,000 deaths annually, with contaminated food contributing to 91 million cases of disease each year (Almaary, 2023). In Uganda, studies have shown that food safety training and awareness campaigns are key to

improving hygiene standards in food establishments (Lunner-Kolstrup, 2016). In addition, foodborne illnesses are a common concern, with various studies highlighting the role of restaurants in the transmission of these diseases (Okello., 2025). Somali-owned restaurants in Kansanga, Uganda, contribute significantly to the local food economy and cultural exchange, but there is limited research on the food hygiene knowledge, attitude, and practices (KAP) of restaurant staff in this specific setting (Carlson, 2019). Food hygiene knowledge among restaurant staff is essential for preventing foodborne diseases, as it influences the way food is handled, stored, and prepared (Al Banna, 2022). However, despite such efforts, there remains a gap in the proper implementation of food hygiene practices, especially in restaurants that may not prioritize formal training.

2.0 Methods and Materials

Research Design

A descriptive cross-sectional study design was chosen to collect data at a specific point in time from Somali-owned restaurant staff in Kansanga, Uganda.

Study Population

The target population for this study consists of the staff working in Somali restaurants located in Kansanga, a suburb of Kampala, Uganda.

Kansanga is home to a large number of Somali-owned restaurants that serve both the local Ugandan population and expatriates.

Sampling Technique

The study employed a stratified random sampling technique to select participants. The restaurants were grouped into strata based on their size (small, medium, and large) to ensure representation across different types of establishments.

Data Collection Methods

Data was collected using questionnaires to assess the staff's knowledge of food hygiene, their attitudes towards food safety, and the hygiene practices they follow. Also, direct observations were documented including waste collection points, environmental degradation, and disposal techniques in the area.

Data Analysis Techniques

The study was analyzed by using Statistical Package for Social Science (SPSS), version 20, to generate descriptive statistics such as frequencies and percentages.

3.0 Results and Discussion

The socio-demographic data provides critical insights into the profile of staff working in Somali-owned restaurants in Kansanga, Uganda, which helps contextualize the study's findings on food hygiene knowledge, attitudes, and practices. Below is a detailed interpretation of each variable.

Table 1: Gender dominance

Variables of the Respondents	Frequency	Percentage
Gender of the Respondents		
Male	86	79
Female	23	21
Total	109	100.0
Age Group of the Respondents		
18-28	55	50
29-39	39	36
40-50	11	10

Over 50	4	4
Total	109	100.0
Education Level of the Respondents		
No formal education	16	15
Primary education	57	52
Secondary education	36	33
Total	109	100.0

Source: Primary data, 2025.

Table 1 findings show that the male dominance (79%) in the restaurant workforce is predominantly male, reflecting potential gender disparities in employment opportunities or cultural norms in the food service industry. Limited female participation (21%), this could indicate barriers such as societal roles, lack of training opportunities for women, or workplace biases. Addressing gender inclusivity in hygiene training programs may improve overall compliance. Youthful workforce (50% aged 18–28): Younger staff may lack experience or long-term exposure to hygiene protocols,

necessitating targeted training. Decline in older age groups (10% aged 40–50, 4% over 50) suggested high turnover or the physically demanding nature of the job. Older workers might serve as role models for hygiene practices if retained. Low education levels (67% with primary or no formal education). Limited literacy may hinder comprehension of written hygiene guidelines, emphasizing the need for visual or hands-on training methods. Secondary education (33%): this group could be leveraged as "hygiene champions" to mentor others

Table 2: Level of Knowledge of Somali-Owned Restaurant about Food Hygiene in Kansanga, Uganda

Knowledge Level of the Respondents	Frequency (n)	Percentage (%)
Importance of food hygiene in preventing illnesses	39	36
Familiarity with standards of food safety	27	25
Understanding of cross-contamination risks	15	14
Awareness of proper food storage temperatures	22	20
Regular training on food hygiene	6	5
Total	109	100.0

Source: Primary data, 2025.

In table 2, found that only 36% of staff recognized the critical role of hygiene in illness prevention, indicating low awareness. Merely 5% reported regular training, highlighting a severe gap in capacity building. In addition,

cross-contamination risks (14%) and food storage awareness (20%) were poorly understood, suggesting targeted training is needed in these areas.

Table 3: The Level of Attitude of Somali-Owned Restaurant among Food Hygiene in Kansanga, Uganda

Attitude Level of the Respondents	Frequency (n)	Percentages (%)
Importance of hygiene for customer safety	45	41
Restaurant management's support for hygiene	31	29
Regular handwashing by staff	20	18
Proper food storage practices	13	12
Total	109	100.0

Source: Primary data, 2025.

The findings in table 3 show that 41% valued customer safety, while only 29% felt management supported hygiene efforts, indicating a disconnect between priorities and actions. Handwashing (18%) and food

storage (12%) were rarely prioritized, reflecting poor adherence to basic practices. However, attitudinal barriers (e.g., lack of management buy-in) likely contributed to lax hygiene practices.

Table 4: The Level of Practice of Food Hygiene among Somali-Owned Restaurant in Kansanga, Uganda

Practice Level of the Respondents	Frequency (n)	Percentage (%)
Hand washing while handling food	21	30
Regular cleaning of kitchen surfaces	33	19
Use of gloves with ready-to-eat food	18	17
Proper food temperature monitoring	26	24
Hair restraints worn by kitchen staff	11	10
Total	109	100.0

Source: Primary data, 2025

Table 4 indicates that the critical practices are neglected: Only 30% washed hands regularly, and 10% used hair restraints. In addition, cleaning practices (19%) were relatively better but still inadequate. Whereas glove use (17%) and temperature monitoring (24%) were inconsistent, raising foodborne illness risks.

The study identified four major challenges contributing to poor food hygiene standards in Somali-owned restaurants in Kansanga, Uganda, which collectively pose significant risks to public health and food safety.

Insufficient Training and Awareness

Only 30% of restaurant staff reported receiving any formal food safety training, with most describing it as inadequate. This knowledge gap leads to improper food handling, with only 36% understanding hygiene's role in illness

Challenges Associated with Poor Food Hygiene Standards among Somali Restaurants in Kansanga, Uganda

prevention and just 14% aware of cross-contamination risks. Staff often learn through trial and error, as one worker noted: *"The training we got was minimal... I have to learn most things on my own."*

Substandard Infrastructure

About 45% of restaurants lacked basic facilities like functional handwashing stations, clean water access, or properly maintained refrigerators. Congested kitchens with poor sanitation infrastructure were common, with staff reporting, the kitchen space is small, and there's no proper water supply. These conditions make consistent hygiene compliance nearly impossible.

Operational Pressures

During peak hours, 81% of staff admitted neglecting hygiene protocols to serve customers faster. Understaffing exacerbates the problem, with workers stating, when there are many customers, we don't have time to clean properly. This prioritization of speed over safety leads to skipped handwashing (only 19% compliance) and improper food storage.

Weak Regulatory Oversight

Health inspections were infrequent (averaging <1/year) and inconsistent, with no follow-up on violations. Restaurant owners reported, and inspectors come rarely and only check certain things. This lax enforcement fosters a culture of non-compliance, as establishments face no consequences for hygiene breaches.

4.0 Conclusion and Recommendations

This study identifies significant deficiencies in food hygiene standards within Somali-owned restaurants in Kansanga, Uganda. Insufficient knowledge of safe food handling practices, inconsistent attitudes toward hygiene, and poor adherence to basic protocols. Structural

challenges including inadequate training, substandard facilities, operational constraints, and lax oversight—further exacerbate these issues, mirroring broader regional trends in informal food service sectors.

To mitigate these risks, targeted interventions are imperative, encompassing enhanced staff training, strengthened regulatory enforcement, infrastructure improvements, and active engagement of restaurant management. Implementing these measures will be crucial for safeguarding public health, ensuring food safety compliance, and fostering sustainable business practices. Future initiatives should prioritize integrated approaches that align knowledge, attitudes, and practical implementation of hygiene standards.

The study recommended the following recommendations:

Training Programs: Suggest partnerships with local health departments or NGOs to provide free or low-cost training sessions in Somali or local languages.

Infrastructure Improvements: Propose microfinance or government grants to help restaurants upgrade facilities (e.g., handwashing stations, refrigeration).

Community Engagement: Recommend involving local leaders or influencers to advocate for food hygiene, leveraging community trust.

Technology Integration: Explore mobile apps or SMS reminders for hygiene practices, given the high mobile phone usage in Uganda.

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