
ATTITUDE OF RURAL WOMEN TOWARDS FOOD SAFETY AND HYGIENE PRACTICES IN OYO AGRICULTURAL ZONE, OYO STATE, NIGERIA

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ABSTRACT;

The study examined attitudes of rural women towards food safety and hygiene practices. Most respondents were older adults, with the majority having a formal education, which contributed to favorable attitudes. Key practices such as buying fresh food and handwashing during food preparation were highly emphasized. While a greater proportion of respondents displayed positive attitudes, a considerable number exhibited unfavorable attitudes, posing potential food safety risks. The analysis revealed significant relationships between attitudes and socio-economic factors such as age and household size. Data was collected with a well-structured questionnaire, using multistage random sampling techniques, a sample size of 168 respondents were sampled. Enhancing education and awareness is crucial to addressing unfavorable attitudes, reducing foodborne illnesses, and promoting healthier practices among households.

Keywords; Attitude, food safety, hygiene practices, rural women.

1.0 INTRODUCTION

Rural women are resourceful economic agents who contribute to the income of families and the growth of communities in a multitude of ways (Organization for Economic Co-operation and Development, 2022). They work as entrepreneurs, as farm and non-farm laborer, in family businesses, while they take on a disproportionate share of unpaid work at home. They make up a large part of the growing world population of about 8 billion, and they produce 60-80% of the food in many developing countries, responsible for half of the food production (OECD, 2022). Rural women play a pivotal role in household management, particularly in ensuring the safety and hygiene of the food consumed by their families. In rural communities worldwide, women often serve as the cornerstone of household management, responsible for ensuring the health and well-being of their families (OECD, 2022). Rural women, who are actively involved in almost every stage of production, contribute to the provision of production by applying methods such as fallow, alternating planting and spreading, and various techniques in order to protect the soil, increase its productivity and enrich it so that people can eat healthy and sufficient food (Uzunoz *et al.*, 2018). At the same time, they produce food at home and plays a decisive role in the purchase of foodstuffs. Therefore, it can be said that rural women have an important place in the food chain from farm to table, not neglecting their roles to ensure healthy food for their household (Uzunoz *et al.*, 2018).

Rural women's attitudes towards food safety and hygienic practices should be considered to completely define the term "food safety and hygiene" and to determine the wrong attitudes and beliefs of the rural women households (Bülent, 2015). Although proper food handling, preparation, storage, and feeding practices may prevent many foodborne diseases, each year millions of people become ill and thousands die from these diseases (Senoner *et al.*, 2020). Rural women's households more than any other place have been implicated in food-borne disease outbreaks (Byrd-Bredbenner *et al.* 2015). Fatemeh *et al* (2017), reported that 70 per cent of foodborne illnesses occur at a household level, due to unsafe food handling and preparation methods. They further observed that in rural communities, people do not observe simple rules of hygiene about the care of food and that general sanitation is not observed or maintained. Similarly, Fasoro *et al.* (2016), observed that food preparation in rural households follows traditional practices most of which are deleterious to the health of the household members. It is, therefore, important to understand the interaction of prevailing food safety beliefs, knowledge, attitudes and hygienic practices of rural women to minimize food-borne diseases (Abdullahi, 2016).

2.0 METHODOLOGY

The study was carried out in Oyo State of Nigeria, Oyo State is located in the South-West geopolitical zone of Nigeria, Oyo State was one of the three States carved out of the former Western State of Nigeria in 1976. Oyo State consists of 33 Local Governments and 29 Local Council Development Areas. The State covers a total of 28,454 square kilometers of land mass and it is bounded in the south by Ogun State, in the north by Kwara State, in the west it is partly bounded by Ogun State and partly by the Republic of Benin, while in the East by Osun State.

The study comprised all rural women in Oyo Agricultural zone of Oyo state. Multistage sampling techniques was employed in selecting sample for this study. The first stage involved purposive sampling of three (3) local government area out the Six (6) local government areas in Oyo Agricultural zone of Oyo state due to their rurality. The sampled local government

areas were Iseyin, Itesiwaju and Afijio. The second stage involved 1% random sampling of selected villages from the selected local government area in Oyo Agricultural zone of Oyo state. The final stage involved 40% random sampling of households in the selected villages. This produced 74 households from random sampled villages in Iseyin, 56 households from random sampled villages in Itesiwaju, and 38 households from Afijio local government area respectively. In all a total of 168 households was sampled for this study.

3.0 RESULT AND DISCUSSION

Socio economic characteristics of the respondents.

The study found out that majority (77.4%) of the respondents were above 30 years of age with mean age of 38.5. This is an economically active age and is expected to influence positively the understanding and practices of food safety and hygiene. Likewise, majority (73.8%) of the respondents were married at the time of the survey with mean household member of 5. Similarly, on the level of education, majority (97.6%) of the respondents were educated. This suggests that the respondents are likely to appreciate food safety and hygiene as well as have favorable food safety and hygiene attitudes positively transformed as a result of their educational exposure.

Table 1; Distribution of respondents by socio-economic characteristics.

Socio-economic characteristics	Frequency	Percentage	Mean
Age			
20-29	38	22.6	38.5
30-39	56	33.3	
40-49	43	25.6	
50-59	21	12.5	
>60	10	6	
Marital status			
Single	35	20.8	
Married	124	73.8	
Separated	3	1.8	
Widowed	6	3.6	
Household size			
1-5	119	70.8	5
6-10	49	29.2	
Level of education			
None	4	2.4	
Primary education	22	13.1	
Secondary education	58	34.5	
Tertiary education	84	50	

Source; Field survey 2024.

3.1 Respondents attitude towards food safety and hygiene practices

The distribution of respondent according to their attitude towards food safety and hygienic practices; majority of the respondents strongly agreed that buying of fresh and wholesome food is very important and was ranked 1st with WMS of 4.29, coughing and sneezing when cooking food can contaminate food ranked 2nd with WMS of 4.24, frequent hand washing during food preparation is a worthwhile practice if contamination will be prevented during

food preparation ranked 3rd with WMS of 4.22, separating raw and cooked food helps prevent food borne illnesses ranked 4th with WMS of 3.91, old food products should be used up before new one ranked 5th with WMS of 3.62, using different knives for raw and cooked food might not prevent foodborne illnesses ranked 6th with WMS of 2.95, cross contamination of foods is not likely to occur when you touch raw food and then touch cooked food ranked 7th with WMS of 2.93, drinking well/stream water may not predispose one to food borne illnesses ranked 8th with WMS of 2.61, keeping kitchen surfaces clean is not likely to reduce the risk of food borne illnesses ranked 9th with WMS of 2.49, fruits and vegetables should not be kept in a cool place ranked 10th with WMS of 2.24 while it is safe to leave cooked food for a long time before eating it ranked 11th with WMS of 2.20.

The above results imply that the majority of the respondents had favourable attitudes towards food safety and hygiene practices, especially buying fresh and wholesome food is very important, and frequent hand washing during food preparation is a good practice. This result agreed with the findings of Kumera, Belay and Tefera (2017), who reported that the majority of food handlers had favourable attitudes towards food hygiene and practices.

Table 2; Distribution of respondents by attitude towards food safety and hygienic practices

Statement	SA	A	U	D	SD	WMS	Rank
Buying fresh and wholesome food is very important.	107(63.7)	34(20.2)	5(3.0)	13(7.7)	9(5.4)	4.29	1 st
Coughing and sneezing when cooking food can contaminate food.	94(56.0)	45(26.8)	12(7.1)	9(5.4)	8(4.8)	4.24	2 nd
Frequent hand washing during food preparation is a worthwhile practice if contamination will be prevented during food preparation.	115(68.5)	24(14.3)	1(0.6)	7(4.2)	21(12.5)	4.22	3 rd
Separating raw and cooked food helps prevent food-borne illnesses.	77(45.8)	53(31.5)	6(3.6)	10(6.0)	22(13.1)	3.91	4 th
Old food products should be used up before new ones.	60(35.7)	53(31.5)	15(8.9)	12(7.1)	28(16.7)	3.62	5 th
Using different knives for raw and cooked food might not prevent foodborne illnesses.	32(19.0)	40(23.8)	23(13.7)	34(20.2)	39(23.2)	2.95	6 th
Cross-contamination of foods is not likely to occur when you touch raw food and then touch cooked food.	31(18.5)	35(20.8)	33(19.6)	30(17.9)	39(23.2)	2.93	7 th
Drinking well/stream water may not predispose one to food-borne illnesses.	23(13.7)	33(19.6)	25(14.9)	29(17.3)	58(34.5)	2.61	8 th
Keeping kitchen surfaces clean is not likely to reduce the risk of foodborne illnesses.	30(17.9)	25(14.9)	10(6.0)	36(21.4)	67(39.9)	2.40	9 th

Fruits and vegetables should not be kept in a cool place.	27(16.1)	11(6.5)	11(6.5)	45(26.8)	74(44.0)	2.24	10 th
It is safe to leave cooked food for a long time before eating it.	17(10.1)	14(8.3)	25(14.9)	41(24.4)	71(42.3)	2.20	11 th

Source; Field survey 2024

***Multiple responses**

WMS; Weighted means scores

Percentage (figures in parenthesis)

SD – Strongly Disagree, D – Disagree, A – Agree, SA – Strongly Agree, U – Undecided

3.2 Categorization of respondents by attitude towards food safety and hygiene practices

The categorization of the respondents based on their attitude towards food safety and hygiene practices. Little above average (54.5%) of the respondents had a favorable attitude towards food safety and hygiene practices, while 45.5% had an unfavorable attitude towards food safety and hygiene practices. It can be inferred that the favorable attitude towards food safety and hygiene practices demonstrated by the respondents could be attributed to the interrelationship of their food safety and hygiene knowledge, and practices. It is also believed that food safety and hygiene knowledge and practices do influence attitudes towards food safety and hygiene practices (Karen, 2015). Suffice it to say that as respondents demonstrate a favorable attitude towards food safety and hygiene practices the rate of foodborne illness outbreaks at the household level will be greatly reduced. Likewise, the unfavorable attitude towards food safety and hygiene practices of respondents can aggravate food safety risks. This will enhance and promote healthiness among individuals. This assertion is corroborated by the findings of Al Shakkaf (2013), that a favorable attitude towards food safety and hygiene practices could help to mitigate/prevent the rate of food-borne illness outbreaks at the household level.

Table 3 Categorization of respondents by attitude towards food safety and hygiene practices

Practices	Frequency	Percentage
Favorable	92	54.5
Unfavorable	76	45.5
Total	168	100

Source; Field survey 2024

4.0 Test of hypothesis

For this hypothesis, Pearson Product Moment Correlation was used to test for the significant relationship between the selected socio-economic characteristics and their attitudes towards food safety and hygiene. The result of the analysis revealed that some of the selected socio-economic variables such as age ($r=0.238^{**}$ $p\leq 0.002$), household size ($r=0.172^{*}$; $p\leq 0.026$) respectively exhibited significant relationship with their attitudes towards food safety and hygiene in the study area.

The significant correlation observed between age and attitude towards food safety and hygiene practices ($r=0.238^{**}$ $p\leq 0.002$) indicates that as rural women advance in age their attitudes towards food safety and hygiene increase positively, thereby resulting in a more favourable attitude. The significant relationship between household size and attitudes towards food safety may be due to the respondents' small household size. This could mean that, as households in this study had few family members to cater for, one would expect that the

available family resources would be favourably deployed to provide necessary resources which would make it easier to adhere to food safety practices when compared to having larger households. Therefore, the null hypothesis which stated that there is no significant relationship between the selected socio-economic characteristics and attitudes towards food safety and hygiene is rejected, hence, the alternative hypothesis is accepted.

Table 4 Summary of Pearson Correlation analysis showing relationships between selected socio-economic characteristics and attitudes towards food safety and hygiene

Variable	r-value	p-value	Decision	Remark
Age	0.238**	0.002	Not significant	Reject
Household	0.172*	0.026	Not significant	Reject

Source: Computed Data, 2024

** Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at 0.05 level (2 tailed)

5.0 Conclusion and recommendation

Based on the findings from this study, it can be concluded that rural women were in their economically active stage, literate and the majority had a favorable attitude towards food safety and hygiene practices. hence the following recommendations were made based on the findings of the study;

- The result from this study shows that some of the respondents had unfavorable attitudes to food safety and hygiene, therefore sensitization programmes on available media should be launched in rural areas by relevant stakeholders to raise awareness on the importance of appropriate food safety and hygiene practices.
- Food safety and hygiene education should be given to rural women, based on the context of their local circumstances. The education material should cover areas of personal hygiene, environmental sanitation, cross-contamination, and good cooking habits to avoid foodborne illnesses.

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