

Impact of Intervention Program on Knowledge, Attitude and Practices of Food Adulteration

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ABSTRACT

Impact of intervention program on knowledge, attitude and practices of food adulteration was conducted in Lucknow City. 400 respondents were selected from the Lucknow city using multistage stratified random sampling technique. All women were, categorized by age, education level, family type, and income group, to assess their food behaviour, purchasing habits, sources of information, and knowledge about food adulteration, as well as the impact of an intervention on these factors. The mean age of participants was 33.63 years (SD = 5.94). Education levels varied, with 47% holding postgraduate degrees, 26% graduates, and 3% illiterate. Most participants (81%) were from nuclear families, and income distribution showed 53.25% earning between 35,000 and 70,000, 32.5% below 35,000, and 14.25% above 70,000 monthly. Findings indicated that most women purchased food from wholesale markets, 29.25% from retail shops, and 8% from street vendors. Information on food adulteration was mainly obtained from TV (42.25%), books (35.75%), and mobile phones (14.5%). Most of the respondents (65.25%) believed adulteration occurred for profit, while 27.25% thought it was to increase weight. Post-intervention results revealed an increase in mean values for knowledge (from 9.05 to 10.47), attitude (from 22.68 to 23.35), and practices (from 4.91 to 6.55), indicating a positive impact on the participant's knowledge and behaviour regarding food adulteration.

Key Words : Food Adulteration, AGMARK, FPO, Health, Information

INTRODUCTION

Food adulteration is a critical public health concern, impacting the safety and quality of food consumed by the population. Adulteration involves the addition of substances to food items to increase quantity and profit at the expense of quality, which poses significant health risks. Understanding consumer behaviour, awareness, and knowledge about food adulteration is crucial for developing effective interventions and policies to mitigate these risks.

This study aims to explore the food purchasing habits, sources of information, and knowledge of women regarding food adulteration. Women, as primary caregivers and often responsible for household food purchases, play a pivotal role in ensuring food safety. By examining the factors influencing their food choices and

their awareness of food adulteration, this study seeks to identify gaps in knowledge and the effectiveness of educational interventions.

The research categorizes participants based on age, education level, family type, and income group to provide a comprehensive analysis. It also evaluates the impact of an educational intervention on improving knowledge, attitudes, and practices related to food adulteration. The findings aim to contribute to the development of targeted strategies to enhance food safety awareness and reduce the prevalence of food adulteration.

Objective:

To assess the knowledge of food adulteration among the respondent's assessment of intervention program on Knowledge attitude and practices of food adulteration.

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METHODOLOGY

Four hundred women from Lucknow city as a unit of information were selected through Multi State stratified random sampling and the required information was collected using free tested and free tested was used to access the knowledge the knowledge regarding Food Adulteration.

Tools of the study:

A self-structured and pre tested questionnaire developed by the researcher was used to assess the knowledge regarding food adulteration and interventional study material were also developed to enhance the knowledge regarding food adulteration.

RESULTS AND DISCUSSION

The collected data work tabulated analyzed discussed and presented in the table given below:

General information (Background profile):

Table 1 reveals the distribution of selected women according to their age. Out of 400 women. majority (39.50%) were in the age group of 30 - 35 years of age, followed by (16.75%) in the age group of 35 - 40 years and minimum (5.00%) were in the age group of 35 - 40 years. 16.50%, 16.00% and 6.25% were in the age group of 25 - 30 years, 40 - 45 years and 45 - 50 years, respectively.

Table 1 : Distribution of the selected respondents according to their age		
Age in Years	Respondents	
	Number	Percentage
20 – 25	20	5.00
25-30	66	16.50
30-35	158	39.50
35-40	67	16.75
45-50	25	6.25
Total	400	100.00

Distribution of selected women according to their education were noted, analyzed and displayed in the Table 2. Out of the 400 selected women for the present study, majority (47.00%) were educated upto post graduate level, followed by 26.00% graduate level and the minimum (1.50%) were found to be illiterate. It was also noted from the above table that 8.00%, 6.25%, 5.75% and 5.50% were educated to high school, primary,

intermediate and junior high school level, respectively.

Table 2: Educational status of the respondents		
Education	Respondents	
	Number	Percentage
Illiterate	6	1.50
Primary	25	6.25
Junior High School	22	5.50
High School	32	8.00
Intermediate	23	5.75
Graduate	104	26.00
Postgraduate	188	47.00
Total	400	100.00

The distribution of selected women according to type of family were recorded and displayed in the Table 3. Majority (81.00%) of the selected women belonged to nuclear families and remaining (19.00%) to joint families in the present study.

Table 3: Distribution of selected respondents according to type of family (mode of family)		
Type of Family	Respondents	
	Number	Percentage
Nuclear	324	81.00
Joint	76	19.00
Total	400	100.00

The distribution of selected women according to their family monthly income were noted, analyzed and presented in the Table 4. Out of 400 women. majority (53.25%) were belonged to families having monthly income of Rs. 35000 - Rs. 70000, followed by (32.50%) to families having monthly income of below Rs. 35000 and the minimum (14.25%) were belonged to families having monthly income of Rs. 70000 and more.

Table 4 : Family monthly income		
Family Monthly Income	Respondents	
	Number	Percentage
0-35000	130	32.50
35000-70000	213	53.25
70000 and more	57	14.25
Total	400	100.00

Food behavior of the respondents:

Table 5 indicates the knowledge regarding purchase of food items by the respondents. Out of the 400 respondents, majority of them purchased the food items from the wholesale market, followed by 29.25% from

the retail shop and the minimum (8.00%) purchased the food items from the street vendors.

Table 5 : Purchasing of food items by the respondents		
Food items	Respondents	
	Number	Percentage
Whole market	142	35.50
Retail Shop	117	29.25
Street Vendors	32	8.00
Departmental Store	49	12.25
Total	400	100.00

Table 6 shows the source of adulteration in food items by the respondents. Out of the 400 respondents, majority of them (45.25%) informed that main source of adulteration in food items from TV, followed by 35.75% from the books and the minimum (4.50%) informed the source of adulteration in food items from the friends. 14.50% of the respondents showed that the source of adulteration in food items from the mobile phone.

Table 6 : Source of information regarding Food Adulteration		
Food items	Respondents	
	Number	Percentage
By TV	181	45.25
Mobile Phone	58	14.50
Friends	18	4.50
Books	143	35.75
Total	400	100.00

Table 7 indicates the cause of adulteration in food items by the respondents. Out of the 400 respondents, majority of them (65.25%) informed that main cause of adulteration in food items was to get more profit, followed by 27.25% increase the weight of food items and the minimum (0.75%) informed the cause of adulteration in food items was to attract consumer. 6.75% of the respondents reported that the cause of adulteration in food items was to increase the volume showing lower price.

Table 8 reveals the effect of intervention

Table 7: Causes of food adulteration		
Causes of food Adulteration	Respondents	
	Number	Percentage
To get more profit	261	65.25
To increase the weight	109	27.25
To increase the volume showing lower price	27	6.75
To attract consumer	03	0.75
Total	400	100.00

program regarding knowledge, attitude and practice on food adulteration among the respondents. Before the intervention, mean scores of knowledge, attitude and practice on food adulteration among the respondents were 9.05, 22.67 and 4.91 respectively. After intervention program, the knowledge, attitude and practice on food adulteration among the respondents were significantly increased as 10.47, 23.35 and 6.55 respectively. The mean differences of knowledge, attitude and practice on food adulteration among the respondents were found to be significant ($p < 0.05$). Analysis of the data from the above table indicates that more increased in practice was observed among the respondents as compared to knowledge and attitude. The hypothesis that effects of counseling regarding knowledge, attitude and practice on food adulteration among the respondents were found significant and the hypothesis were rejected. Thus, the hypothesis that significant effects regarding knowledge, attitude and practice on food adulteration among the respondents were observed. Quadros and Battalwal (2018) reported that a significant changes regarding knowledge, attitude and practices for food adulteration were observed after intervention program similar findings were also observed by Anila and Prasanna Kumari (2015) that significant positive changes in knowledge, attitude and practices for food adulteration were observed after intervention program. Dhanvijay and Ambedkar (2015) founded in their study that educational program had a positive effect to increase awareness of food adulteration among students.

Table 8 : Effect of intervention regarding knowledge attitude and practice on food adulteration among the respondents								
Parameter	Before Intervention		After Intervention		Changes		Statistical Values	
	Mean	SD	Mean	SD	Mean	SD	T	P
Knowledge	9.05	2.39	10.47	2.29	+1.42	0.96	29.583	<0.05
Attitude	22.68	1.61	23.35	0.92	+0.67	1.20	11.167	<0.05
Practice	4.91	1.85	6.55	1.83	+1.64	0.92	35.652	<0.05

Conclusion:

In this research study, 400 women were participated which were categorized according to their age group, education level, type of family and income group. As per age group, the mean age of participant was 33.63 with standard deviation of 5.94. As per education level, 47% of women were educated up to post graduate level, 26% of them were educated up to graduate level and 3% were illiterate. According to family type, 81% of women were belong to nuclear family and remaining belongs to joint family. According to criteria of their family's monthly income, 53.25% were belong to monthly income group of 35000 – 70000, 32.5% of them belong to income group below 35000 and 14.25% belong to income group of more than 70,000.

We concluded the food behavior of the respondents according to their purchasing habits, source of information, knowledge on cause of food adulteration and effect of intervention. As per their purchasing habits majority of them purchased food items from whole sale market, 29.25% were purchased from retail shop and 8% of them were purchased from street vendors. As per their source of information for adulteration, 42.25% get the information regarding food adulteration from TV, 35.75% from book and 14.5% from mobile. As per their knowledge on cause of adulteration, 65.25% accept that food adulteration occurs due to gain of more profit,

27.25% said to increase the weight.

After intervention, result were compared according to mean value for knowledge which increased from 9.05 to 10.47, for attitude which increased from 22.68 to 23.35 and for practices, mean was changed from 4.91 to 6.55.

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