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To Study the Different Food Product Contamination and Food Handling Practices in 85 House Hold in Lucknow City

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Abstract: ***Background:*** ***The present study was carried out to find out the food contamination and food poising with the aim of to aware the kitchen holders and homemakers regarding safety and sanitary handling of products. The changes of food contamination largely depend on the health status of food handlers and their hygiene behavior and practices.*** ***Objective:*** ***To assess the food handling practices in kitchen holders.*** ***Setting and Participants:*** ***Total of 85 kitchen holders was selected from three different areas of Lucknow District.*** ***Methodology:*** ***The study was carried out using the following tools for analyzing the food product contamination and food handling practices Self designed questionnaire was used in the study.*** ***Statistical Analysis:*** ***SPSS Statistic 20 for statistical processing. Descriptive statistics of frequency to analyze general characteristics, and food contamination pattern.*** ***Results and Discussion:*** ***Both male and female are not much aware about food contamination. But females were keep their kitchen clean and dry and having good sanitary habits more than male so females are much aware than male about food handling practices.*** ***Conclusion:*** ***The health status and the level of personal hygiene of the food handlers in the eating establishments were found to be unsatisfactory. Food hygiene can be best promoted by educating the kitchen holders about personal hygiene.***

Keyword: Salmonella bacteria, food contamination, food safety, sanitation and hygiene.

1. Introduction

Food borne diseases are increasing in both developed and developing countries. Diarrheal diseases, mostly caused by food borne microbial pathogens, are leading causes of illness and deaths in the developing countries, killing an estimated 1.9 million people annually at the global level . Food contamination may occur at any point during its journey through production, processing, distribution, and preparation. The risk of food getting contaminated depends largely on the health status of the food handlers, their personal hygiene, knowledge and practice of food hygiene. Infections can also be acquired through contaminated unwashed fingers, insects, and circulation of bank notes and by wind during dry conditions. Contamination of food with eggs and cysts especially those sold by hawkers may also serve as a source of infection to consumers of such items. Therefore, food handlers i.e. any person who handles food, regardless whether he actually prepares or serves it, play an important role in the transmission and, ultimately, prevention of food borne disease.

Information regarding food handlers' practices is key to addressing the trend of increasing food borne illnesses. In recent years, due to changing lifestyle, breakdown of joint family system and increase in number of working women has led to consumption of *ready to eat* foods. The individuals may be able to satisfy their taste and nutrition needs, but pays little attention to hygiene and food safety. The term *food safety* is increasingly being used in place of *food hygiene* and encompasses a whole range of issues that must be addressed for ensuring the safety of prepared food. Food hygiene probably put too much emphasis on cleanliness but food safety requires much more than a clean premises (Food Hygiene Safety). The high incidence of food borne illnesses has led to an increase in global concern about food safety. Several food-borne disease outbreaks have been reported to be associated with poor personal hygiene of people handling foodstuffs. Typhoid is strictly a human disease. The incidence of human disease decreases when the level of development of a country increases (i.e., controlled water sewage systems, pasteurization of milk and dairy products). Where these hygienic conditions are missing, the probability of fecal contamination of water and food remains high and so is the incidence of typhoid.

1.1 Objective of the study

To **assess** the food handling practices in kitchen holders.

1.2 Design

A study was conducted recruiting kitchen holders and they were selected from the Lucknow district, Uttar Pradesh.

1.3 Setting and Participants

A total of school 85 kitchen holders were selected randomly. A total of 85 kitchen holders were selected from three different area of Lucknow district between the age group of 25-35,35-45 year.

2. Methodology

The investigation was carried out on kitchen holders. The subject was selected from Lucknow city of Utter Pradesh.85 kitchen holders (30 male &55 females) were included in the study. The age range of the subject was 25-35 years and 35-45 year as they were selected randomly. Self made questionnaire was used for sample survey. Tabulation was done with the help of analysis was done by SPSS (20th version). t test was used for data analysis.

3. Results and Discussion

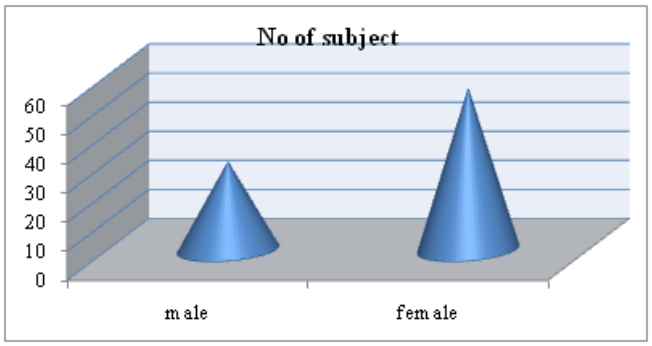

Figure 1: Distribution of respondent according to sex

From the above graph it is clear that there were majorities 64.7% of the respondent sample were female and 35.3% respondent sample were male in the age group of 25-35, 35-45 year.

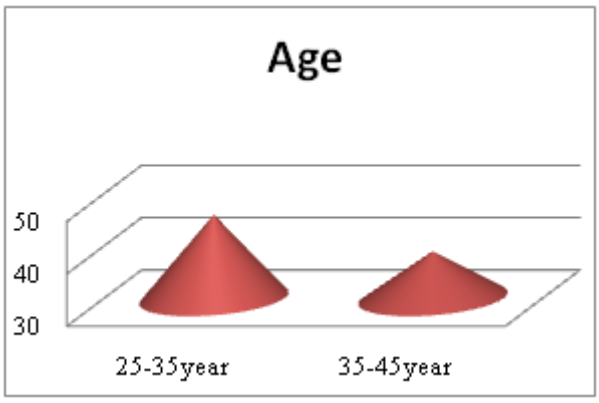

Figure 2: Distribution of respondent according to age

This graph is indicated that 54.1% of kitchen holders are belonging to the age of 25-35year and 45.9% were belonging to the age of 35-45 year.

Table 1: Frequency distribution of the respondent on the basis of Use of reheated food

S.N	Use of reheated food	Male	Female
1	Usually	N	N
		19(63.3%)	28(50.9%)
2	Often	6(20.0%)	16(29.1%)
3	Never	5(16.7%)	11(20.0%)
4	total	30(100%)	55(100%)

This table show that 37 % of respondent were usually reheat the food more than once and 29 % of sometimes respondent were reheat the food more than once and 19 % of respondent were **Never** reheat the food more than once .

Table 2: Frequency distribution of the respondent on the basis of Use of apron and pesticides in kitchen

Statement	*Male*			*Female*		
	Yes	No	Total	Yes	No	Total
Use apron	1 (3.3%)	29 (96.7%)	30 (100%)	8 (14.5%)	47 (85.5%)	55 (100%)
Use pesticides in kitchen	13 (43.3%)	17 (56.7%)	30 (100%)	18 (32.7%)	37 (67.3%)	55 (100%)

This table shows that the percentage of using apron was 1% of male respondent use and 8% of female respondent, 13 % of male using pesticides in kitchen and 18% of female respondent.

Table 3: Frequency distribution of the respondent on the basis of Cleaning of fridge

S. No	*Cleaning of fridge*	*Male*	*Female*
1	Daily	N	N
		2(6.7%)	4(7.3%)
2	In a week	18(60.0%)	28(50.9%)
3	Monthly	10(33.3%)	23(41.8%)
4	Total	30(100%)	55(100%)

This table show that 6 % of respondent were daily Clean the fridge and 46% of respondent Clean the fridge weekly and 33% of respondent were of Clean the fridge monthly.

Table 4: Frequency distribution of the respondent on the basis of Times of clean working area

S. N	*Times of clean working area*	*Male*	*Female*
1	One time	N	N
		20(66.7%)	28(50.9%)
2	Two time	10(33.3%)	21(38.2%)
3	Three time	0(0%)	6(10.9%)

This table show that 48 % of respondent were clean the working area only one time and 31 % of respondent were clean the working area two time and 6% of respondent were clean the working area three times.

Table 5: Frequency distribution of the respondent on the basis of cut their nails habits

S. No	*Times of cut the nails*	*Male*	*Female*
1	Monthly	N	N
		17(56.7%)	32(58.2%)
2	Monthly twice	13(43.3%)	23(41.8%)
3	Total	30(100.0%)	55(100%)

This table shows that 49 % of respondent were cut their nails monthly and 36 % of respondent were cut their nails monthly twice.

4. Conclusion

This study concluded that education regarding the prevention of food –borne disease is required if standards are to improve. In this study kitchen holders indicated low levels of awareness regarding the causes of food borne disease, high-risk food items and cross-contamination. Both male and female were not using the apron and pesticides so this was also basic cause of food contamination. Everyone has to be developing good habits in their daily life and should be keep their kitchen clean and dry.

5. Recommendations

5.1 To avoid food contamination you have to follow this.

Wash hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers and handling pets. Wash cutting boards, utensils, soapy water after preparing each food item and before you go on to the next food. Cut your nails properly. Avoid cross-contamination of other foods. Separate raw meat, poultry, seafood and eggs from other foods in your grocery shopping cart, grocery bags, your kitchen and in your refrigerator.

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