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AWARENESS AND ATTITUDES OF FOOD SAFETY KNOWLEDGE AND PRACTICES OF WOMEN IN TAMIL NADU

Article Particulars

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Abstract

This present research paper examines the awareness of food safety knowledge and practices of women. It analyzes, to what extent the women consumers have awareness practical knowledge in Food Safety. 185 data were collected through convenience sampling method. The significance of the study is tested with Cross Tabs, Chi-Square Test, One way ANOVA, and Factor Analysis. The prime objective of the study is to analyse the women awareness of food safety knowledge and practices and their practical application in day to day life at home.

Keywords: *Women Consumer attitudes and awareness, Food safety knowledge and practices.*

Introduction

Each year, millions of people worldwide suffer from food-borne diseases and illnesses resulting from the consumption of contaminated food, which has become one of the most widespread public health problems in the contemporary world (WHO, 2001). The Centre for Disease Control and Prevention Food Net surveillance data show that infants and young children are affected mostly by forborne illness. Earlier studies conducted in mothers have indicated that food safety knowledge tends to increase with age and practice. It revealed that there is a significant proportion of food borne illnesses arises from practices in the home kitchen. The food prepare at home takes important role in food safety. In the world, mothers most often produce, purchase, handle, prepare and serve food for the family. They are the principal guarantors of food safety and quality of food at the household level (FAO, 1997). The association of food poisoning outbreaks and the consumption of contaminated food are significant in many countries (Sockett, 1995). The most common factors contributing to food-borne disease are include safekeeping of food (time/temperature), contaminated equipment, food from unsafe sources, poor personal hygiene, and inadequate cooking. Home food preparation needs to take many precautions to minimize pathogenic contamination of home-prepared foods because they are the final line of defence against food borne illnesses (Mederiros et al., 2004). In India, 90% of women

are involved in the preparation of meals (NIN, 2006). The roles of food handlers, usually women, should ensure food safety and hygiene at the household level (Mederiros et al., 2004).

Statement of the Problem

Improper cooking and cross contamination may not be perceived major food safety threats in the Indian context because certain food safety measures are traditionally practiced by the people perhaps even without the knowledge of the scientific rationale behind them. Balkumar Marthi, (1999); in his study, pointed that Indian social and cultural practices have traditionally been based on religion. Food is generally treated as sacred and it is, therefore, not surprising that all our ancient scriptures and religious texts foster great attention and care to the subject of food preparation, storage and handling and food habits among people. Mothers are usually the final line of defence against food borne illnesses. The food safety awareness and practices are good at mothers. Home cooked foods are considered to be safer than prepared foods bought from outside. Over 90% of households in India, it is the mother who is involved in the preparation of meals. In nature, every mother takes full care about their children. However, as per the UNICEF report the infant mortality rate is high in India (50.78percent) and has 72nd ranks. As per the Indian system, food is prepared and stored in a traditional hygienic way and mothers take full care of their child's food safety. Then a question arises, why the infant mortality rate is high in India. Hence, the researcher has made an attempt to find out the reasons for the high infant death rate in India mainly due to inadequate food safety knowledge and practices.

Objectives

The main objective of the study is to analyze the reasons of food and water borne diseases among women and their children. Based on the main objectives the following other objectives are studied.

- To analyse women background such as age, education, experience, rural and urban area with food safety knowledge and practices.
- To analyze women existing habits, traditional practices and food safety awareness in relation with family health.
- To what extent women have been following the scientific food safety knowledge and practices at home.

Methodology

Sources of Data Collection: Primary data were collected from the consumers by questionnaire and interview method. The consumers were randomly requested to fill the questionnaire. Secondary data are collected from different literatures like books, published in articles of food safety knowledge and practices and websites.

Construction of Tools: The researcher had a discussion with the group of customers. Based on the discussion the researcher constructed a questionnaire and tools to test the variables. Totally, 225 questionnaires were issued to consumers in various areas such as Tuticorin, Muthiahpuram and Vilathikulam. But, the researcher collected data from 185 respondents. The collected data are analyzed by using the statistical tools, such as Percentage Analysis, Cross Tabs, Chi-Square Test, Factor Analysis and One way ANOVA.

Table 1 Sources of Awareness of Food Safety Knowledge and Practices –Age Wise

	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	38.919[a]	25	.038
Likelihood Ratio	40.841	25	.024
Linear-by-Linear Association	.101	1	.751
N of Valid Cases	185		

*0.05 Significant Level

The P value (0.05) is higher than the calculated value. There is a significant relationship in between Age and Awareness of food safety knowledge and practices. It means the age is the impact with the awareness. When the level of age increases, the awareness level of food safety knowledge and practices also increases. Hence, there is the close relationship in between age and Awareness of food safety knowledge and practices.

Table 2 Consumption of Half Cooked Food - Education Wise

Consumption of Half Cooked Food					
Education		**Regularly**	**Not regularly**	**occasionally**	**Total**
Illiterate	Count	6	29	17	52
	% within Education	11.5%	55.8%	32.7%	100.0%
School level	Count	29	26	53	108
	% within Education	26.9%	24.1%	49.1%	100.0%
College level	Count	6	11	8	25
	% within Education	24.0%	44.0%	32.0%	100.0%
Total	Count	41	66	78	185
	% within Education	22.2%	35.7%	42.2%	100.0%

As per table 2, school level respondents consuming half cooked food regularly compared to illiterate and college level, but they are high in consuming half cooked food occasionally also. It concludes that when the level of education increases and the consumption of half cooked food decrease. Foods have no significant relationship between education and the consumption of half cooked food.

Table 3 Hand Washing Practices – Household Size

Component	Initial Eigen values	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings

	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.297	42.973	42.973	4.297	42.973	42.973	3.322	33.223	33.223
2	2.462	24.616	67.589	2.462	24.616	67.589	2.509	25.091	58.314
3	1.446	14.462	82.052	1.446	14.462	82.052	2.374	23.738	82.052
4	.795	7.955	90.006						
5	.410	4.097	94.103						
6	.313	3.132	97.235						
7	.155	1.547	98.782						
8	.080	.798	99.580						
9	.023	.227	99.807						
10	.019	.193	100.000						

In Table 3 Factor Analysis shows that ten variables are reduced to three variables with the important extracted factor. It resulted into a cumulative percentage of 82.052%.

Rotated Component Matrix			
	Component		
	1	2	3
Before cooking without soap	.030	.882	.198
After cooking without soap	.130	.919	-.147
Before cooking with soap	.654	.310	.611
After cooking with soap	.630	.060	.727
Before consuming without soap	.851	-.204	.045
After consuming without	.838	.103	-.028
Before consuming with soap	.593	.361	.616
After consuming with soap	-.129	.774	.567
After using Toilet with soap	-.279	.008	.840
After using toilet without soap	.780	.076	-.061

Factor – 1

It is a combination of the highest loading points.

Before consuming without soap - .851
After consuming without soap - .838
After using the toilet without soap - .780

Factor 1 can be named as **'Hand washing practices without soap '**

Factor – 2

After cooking without soap - .919
Before cooking without soap - .882
After consuming with soap - .774

Factor 2 can be named as **'After and before cooking in hand washing practices'**

Factor – 3

After using the toilet with soap - .840
After cooking with soap - .727
Before consuming with soap - .616

Factor 3 can be named as **'Hand washing practices with soap'**

Among the 10 factors, the three factors such as after cooking without soap, before cooking without soap and hand washing practices with shop are significant factors in awareness of the hand washing practices.

Table 4 Checking of Products – Education Wise One Way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Awareness of ISI	Between Groups	26.099	2	13.050	19.385	.000
	Within Groups	122.517	182	.673		
	Total	148.616	184			
Awareness of FPO	Between Groups	6.181	2	3.091	4.840	.009
	Within Groups	116.219	182	.639		
	Total	122.400	184			
Awareness of AGMARK	Between Groups	14.768	2	7.384	12.899	.000
	Within Groups	104.183	182	.572		
	Total	118.951	184			

*0.05 Significant Level

As per the table, the F value is less than .05. Hence the null hypothesis is accepted and there is no significant difference between the education of women and the checking of products. Therefore, there is no relationship between the education of consumer and the checking of ISI, FPO and AGMARK before buying the products. As per this result even low level educated consumers also check the ISI, FPO and AGMARK.

Table 5 Awareness of Food Safety – Age Wise

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.470	5	4.494	1.586	.166*
Within Groups	507.292	179	2.834		
Total	529.762	184			

*0.05 Significant Level

As per the table, the F value is greater than .05. Hence, the null hypothesis is rejected and there is significant difference between the age of consumers and the awareness of food safety. Therefore, there is a relationship between the age and awareness of food safety. As per this result even low level age group of the consumers level less awareness of food safety.

Findings and Suggestions

- There is a significant relationship in between Age and Awareness of food safety knowledge and practices. It means the age is a significant relation with the awareness. When the level of age increases, the awareness level of food safety knowledge and practices also increases.

- Majority of the school level respondents consuming half cooked food regularly. It is concluded that the level of education and the consumption of half cooked food have no significant relationship between education and the consumption of half cooked food. Parents and teachers should advise to avoid half cooked food, which is harmful to the left.
- In this study, the factor analysis indicated that the majority of the food handlers (.919) wash hands without soap. Awareness should be created among the food handlers to follow the hand washing practices with soap, which helps to good health.
- There is no significant difference between the education of consumers and checking of products at the retail market. When the level of consumers' education increases, the attitude of checking food labels also increases in the retail market. Awareness should be created among the illiterate and low levels educated consumers in checking of food labels before purchasing foods in the retail marketing.
- There is a significant difference between the age of consumers and the awareness of food safety while purchasing food at retail marketing. When the level of consumers' age increases, the food safety knowledge also increases. Awareness should be created among low level age of consumers in food safety knowledge. When the purchase food products through retail marketing.

Conclusion

Generally, mothers are aware the concepts of food safety. It appears that the alarming rate of diarrhoeal deaths among children (<5 years) may not be directly attributable to lack of food safety related knowledge but due to a variety of reasons that are beyond the control of the households. The lack of access to potable water and constraints related to cooking fuel and sanitation in many households seem to be the main reasons for their practices not matching the knowledge. Ensuring food safety at household level depends to a large extent on creating enabling environment with immediate emphasis on providing access to potable water, cooking fuel and sanitation.

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