

Awareness regarding Food Poisoning among the Mothers of Under 5 Year Children Attending at Teaching Hospital, Chitwan

Parita Shrestha¹, Menuka Poudel²

¹Assistant Professor, Department of Nursing, Chitwan Medical College, College of Nursing, Bharatpur, Nepal
paritashrestha29[at]gmail.com

²Department of Nursing, Chitwan Medical College, Teaching Hospital, Bharatpur, Nepal
menukapoudel5020[at]gmail.com

Abstract: Food poisoning affects the public health and the economy which will have negative impact and can cause bigger economical losses and may result in death. Food poisoning is one of the main causes of morbidity and mortality. Globally, almost 1 in 10 people fall ill every year from eating contaminated food and 420,000 die. Especially children under 5 year of age are at particularly high risk, with 11, 25,000 children dying from food borne disease every year South-East Asia region has the second highest burden of food borne diseases, after the African Region. More than 150 million people living in South-East Asia region fall ill and 175,000 die from food borne diseases every year. Among them 60 million children under the age of 5 fall ill and 50, 000 die from food borne diseases in the South-East Asia region every year. The study aimed at identifying the awareness regarding food poisoning among the mothers of under 5 year children attending at teaching hospital, Chitwan. Non-probability purposive sampling technique was used to collect data by using structured interview schedule related to food poisoning. Data was collected in 3 months duration from March 15 to June 14, 2018 in the Pediatric Outpatient Department of Chitwan Medical College, Teaching Hospital. The results found that more than half (56%) of mothers were aware regarding food poisoning. Study showed a significant association between level of awareness and education level of mother ($p= 0.006$).

Keywords: food poisoning, under 5 children, mothers

1. Introduction

Food is a crucial contributor to physical well-being and a major source of pleasure; each food items must be safe, aesthetically pleasing and good tasting. Good food hygiene practice continues to be the primary disease prevention strategy and it is one of the silent victories of public health. The hygiene practices can reduce routine exposure to pathogenic microorganism.¹

Food usually becomes contaminated from poor sanitation or preparation. Food handlers who do not wash hand after using the bathroom or have infection themselves often causes contamination. Improperly packaged food stored at the wrong temperature also promotes contamination. Food poisoning has an impact on human welfare. WHO reported it as one of the main cause for morbidity and mortality in developing countries and identifies food borne disease outbreaks and incidents, including those arising from nature, accidental and deliberate contamination of food, as major global public health threats in the 21st Century.²

2. Need for the Study

Worldwide food borne disease is becoming a public health concern. The WHO African and South-East Asia Regions have the highest incidence and highest death rates among under five years children.² Food poisoning affects masses, especially in place like schools, hospital and offices where food is produced and consumed in large quantities. The rotting of food can be prevented by using appropriate storing, preparing, cooking, cleaning and servicing rules depending on the type of food. Also cooking personnel have

the responsibility for preventing food poisoning and protect human health.

Home cooked food are considered to be safer than prepared foods brought from outside. However, significant proportion of food borne illness arises from practices in the home kitchen. The community health worker can impart safety education to the mothers in the community.³

A study conducted in Yemen reported that the knowledge regarding preventive measures of food poisoning among mother was only 40.72%. Among them 60% of mothers have heard about food poisoning where 65.5%, 49.4%, and 37.2% mentioned causes of food poisoning as contaminated food, contaminated hands and contaminated utensils respectively.⁴

In Nepalese society, mothers are considered the food handlers in the home; their role is to ensure food safety and hygiene for their infants and children. They need to take many precautions to minimize pathogenic contamination of home-prepared foods, because they are the final line of defense against food borne illness. Several studies have shown that there is lack of awareness regarding food safety and need to create awareness of checking packaged food labels and reporting to health authorities.

3. Materials and Methods

Descriptive, cross-sectional research design by using non-probability, purposive sampling technique with structured interview schedule was used to collect data regarding awareness of food poisoning among the mothers of under 5

year children. Ethical clearance was obtained from CMC, Institutional Review Committee. Data was collected in 3 months duration from March 15 to June 14, 2018 in the Pediatric Outpatient Department of Chitwan Medical College, Teaching Hospital. A total number of 134 mothers of under 5 children were interviewed by using structured questionnaire regarding food poisoning.

4. Results

Table 1 showed that only 6% of mothers were from <20 years of age while 49.3% of mothers were in the age group of 26-30 years of age. More than half (59.7%) of the mothers were from nuclear family. Most of the mothers 96.3% were literate, among them more than half (55%) had secondary level whereas only 17.1% had bachelor level education. Regarding occupation, 14.2 % were service holder while 66.4% of mothers were housewife.

Table 2 showed that more than half (56%) of mothers of under 5 children were aware regarding food poisoning.

Table 3 showed a significant association between the level of awareness and educational level of the mother whereas other variables like the age of mother, occupation, education level of mother, past history of food poisoning were not significantly associated with level of awareness regarding food poisoning among the mothers of under 5 year children.

5. Discussion/Conclusion

The study showed that 49.3% respondents are in the age group 26-30 years with median age of 26 years, ranging from 19 years to 33 years. Majority of the respondents were from Nuclear family (59.7%), living in urban area (86.6%), literate (96.3%), secondary education (55.0%) and housewife (66.4%). Regarding past history 7.5% of respondents' child had past history of food poisoning while 6.7% of respondents had past history of food poisoning to themselves.

The findings of the study revealed that more than half (56%) of the respondents are aware regarding food poisoning which is similar to the findings of another study conducted by Hayajneh (2015) where, 50% of the respondents are aware of the food poisoning⁵ whereas Ahmed (2015) found that only 40.72% of the respondents had knowledge about food poisoning.⁴

The study finding revealed statistical significant association between the level of awareness and education level of mother (p=0.006), which is supported, by Aal and Bayouni (2016) revealed that there is significant association between the level of knowledge and mothers' educational level (p<0.001).⁶ Likewise, a similar finding was found in the study conducted by Osagbemi, Abdullahi & Aderibigbe (2010), which revealed that there is significant association between the level of awareness and education level (p<0.005).⁷

The study concluded that more than half of the mothers were aware about food poisoning and the educational status significantly influence their level of awareness.

6. Figures and Tables

Table 1: Respondents' Socio-demographic Characteristics, n=134

Variables	Frequency	Percentage
Age groups in year		
≤20	8	6
21-25	50	37.3
26-30	66	49.3
>30	10	7.5
<i>Median age = 26 IQR= Q3-Q1=28-23, min=19, max=33</i>		
Type of family		
Nuclear	80	59.7
Joint / Extended	54	40.3
Residence		
Rural	18	13.4
Urban	116	86.6
Education status		
Literate	129	96.3
Illiterate	5	3.7
Education level (n= 129)		
General education	4	3.1
Basic education (upto 8 class)	32	24.80
Secondary education (9 to 12 class)	71	55.0
Bachelor level or above	22	17.1
Occupation		
Housewife	89	66.4
Agriculture	9	6.7
Service holder	19	14.2
Self employed	5	3.7
Business	12	9.0
Number of children		
1	64	47.8
2	56	41.8
3	14	10.4
Age group of last child in months		
≤24 months	65	48.5
>24 months	69	51.5

Table 2: Respondents' Level of Awareness regarding Food Poisoning

Level of Awareness	Frequency	Percentage
Aware(Median Value ≥ 18)	75	56
Unaware(Median Value < 18)	59	44
Total	134	100

Median (IQR) =18 (23-19), Min= 9, Max= 23

Table 3: Association between Respondents' Level of Awareness regarding Food Poisoning and Selected Variables

Variables	Level of Awareness		χ ²	P-value
	Aware No. (%)	Unaware No. (%)		
Age of mother				
<26 year	27(46.6)	31(53.4)	3.486	0.620
≥26 year	37(63.8)	21(36.2)		
Education level				
Up to secondary	61(57.0)	46(43.0)	7.583	0.006**
Bachelor or above	20(90.1)	2(9.1)		
Occupation				
House wife	48(53.9)	41(46.1)	0.446	0.504
Others	27(60.0)	18(40.0)		
Educational level of				

husband				
Up to Secondary	6(60.0)	4(40.0)	0.000	1.000*
Bachelor or above	67(55.4)	54(44.6)		
History of food poisoning among child				
Yes	6(60.0)	4(40.0)	0.000	1.000*
No	69(55.0)	55(44.0)		
Self history of food poisoning				
Yes	6(66.7)	3(33.3)	0.103	0.748*
No	69(55.2)	56(44.8)		

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