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WOMEN'S AWARENESS ABOUT DOMESTIC ACCIDENTS AMONG TODDLERS

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ABSTRACT

Accidents are the largest single cause of death after the age of one year and are one of the serious health problems facing the world today. Unintentional injury is the leading cause of death among toddlers. The aims of this study were i) to assess women's knowledge about the nature and type of most commonly found unintentional domestic accidents among toddlers. ii) to assess the knowledge of women regarding first aid measures against domestic accidents among toddlers. iii) to assess the knowledge of women regarding prevention of domestic accidents among toddlers. iv) to find out the socio-economic and demographic factors influencing the knowledge level of women regarding domestic accidents among toddlers. The present study has been carried out in Kottaiyadi, North Vallioor, Anaikulam and Thirumalapuram Villages in Vallioor Panchayat, Tirunelveli District and the sample was included 300 women who had children under five years. A structured questionnaire sheet was developed by the researcher to collect data. Data were collected by interviewing each mother on her home. The data was entered in MS Excel and analyzed using SPSS (13 Version) statistical software. The collected data were analyzed by using Simple proportions, Chi-squared test, Correlation test, "t" test and ANOVA test. A p-value of < 0.05 was considered statistically significant. Data on nature and types of domestic accidents show that 164 (54.7%) out of 300 population had average knowledge, 76(25.3%) of the population had adequate knowledge and 60(20%) of the population had inadequate knowledge. Data on first aid of domestic accidents show that, 146 (48.7%) of the population had average knowledge, 95(31.6%) of the population had adequate knowledge and 59(19.7) population had inadequate knowledge. Data on prevention of domestic accidents show that 130(43.3%) of the population had average knowledge, 123(41%) population had adequate knowledge regarding preventive measures of domestic accident and 47(15.7%) of subjects had inadequate knowledge regarding preventive measures of domestic accident. Knowledge on domestic accidents seems to have significant association with age of the women, religion of the women, and family's monthly income of the women. The present study recommended that there is a need for well planned health educational program about causes of domestic accidents, first aid management, and method of prevention for women, for mothers, caregivers, school teacher and capacity building of village level health workers. As there is a need for injury prevention education for students, the same may be included in the higher school curriculum and college level curriculum.

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INTRODUCTION

"Nothing is more frightening for a family than a serious illness or accident experienced by a child"

-John Reid, Former Secretary of State for Health Fore wood,
National Service Frame Work for Children

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Accidents are a major cause of morbidity and mortality in children. Along with cardiovascular diseases and cancers, accidents currently form the 3rd leading causes of morbidity and mortality in developed and developing countries. Accidents at home are more common than on the roads. Negligence of children by elders at home increases the risk. A joint report by WHO and UNICEF says that more than 2,000 children die every day as a result of unintentional injuries. Injuries cause almost 40% deaths among toddlers. Accidents at home occur more often when the home routine is changed. Parental carelessness especially mother's lack of supervision and ignorance are the chief factors for accidents at home.

MATERIALS AND METHODS

Descriptive Explorative Survey design was used for collecting data from the subjects. The study areas were selected by the technique of two-stage sampling. In first stage, the South zone of Tirunelveli District was selected by random sampling method. In second stage, the study areas in Vallioor were selected by convenient sampling method. The study was undertaken in 4 villages namely Kottaiyadi, North Vallioor, anaikulam and thirumalapuram villages in the North part of Vallioor Panchayat Union in Radhapuram taluk in Tirunelveli District in the Indian state of Tamil Nadu. The women in Vallioor, Tirunelveli District constituted the population. Representative sample of 300 women were drawn from four areas belonging to Vallioor Panchayat by using purposive sampling method. Demographic data were collected and structured interview questionnaire was administered to the 300 samples. A structured interview sheet was developed based on relevant literature in order to assess knowledge of women toward domestic accidents among toddlers.

Section A includes demographic characteristics of women as follows

- Age
- Education
- Occupation
- Religion
- Type of family
 - Family' monthly income
 - Number of children
 - Number of Accidents
 - Type of Accident
 - Occupation of spouse
 - Source of knowledge

Section B Structured interview Questionnaire-This questionnaire consists of 45 open ended questions regarding domestic accident. This questionnaire had three parts i.e. Part-I, Part II, and Part III.

Part-I has 20 open ended questions regarding nature and types of common domestic accidents among toddlers such as falls, burns, drowning ,suffocation, choking, cuts, poisoning and animal and insects bites.

Part-II has 15 open ended questions regarding first aid measures for domestic accidents.

Part-III has of 10 open ended questions regarding preventive measures for domestic accidents.

Scoring Procedures

Part-I- The highest score is '40' and the least score is '0'. The knowledge was classified as follows:

Fixation of Scale A

Score	Knowledge category
< 15	Poor
15-22	Average
>22	Good

Part-II- The highest score is '40' and the least score is '0'. The knowledge was classified as follows:

Fixation of Scale B

Score	Category of Knowledge
< 6	Poor
9-15	Average
>15	Good

Part-III- The highest score is '30' and the least score is '0'. The knowledge was classified as follows:

Fixation of Scale C

Score	Category of Knowledge
< 7	Poor
7-10	Average
≥10	Good

Table 1. Frequency and Percentage Distribution of Women on Demographic Characteristics (N=300)

Variable	Categories	N	Percentage
Age (years)	< 20	4	1.3
	20 – 29	176	58.7
	30 – 39	112	37.3
	>39	8	2.7
Educational Status	Illiterate	3	1.0
	Primary Education	29	9.7
	Secondary Education	144	48.0
Occupation	College	124	41.3
	Working	65	21.7
Spouse occupation	Not working	235	78.3
	Working	295	98.3
Religion	Not working	5	1.7
	Hindu	258	86.0
Type of Family	Christian	39	13.0
	Muslim	3	1.0
	Nuclear	213	71.0
Family monthly Income (In Rupees)	Joint	87	29.0
	< 2000	27	9.0
Number of children	2000 – 3000	37	12.3
	3000 – 5000	64	21.3
	5000 above	172	57.4
Type of accident	1	144	48.0
	2	131	43.7
	>2	25	8.3
Number of accidents	No Accident	110	36.7
	Falls	175	58.3
	Scalds	12	4.0
	Insect bite	1	0.3
	Cut injury	2	0.7
Sources of information	No Accident	110	36.7
	< 5	162	54.0
	5 and above	28	9.3
Sources of information	Self	144	48.0
	Media	58	19.3
	1. TV	43	14.3
	2. Magazines	13	4.3
	3. Books	2	0.7
	Relatives& Parents	45	15.0
	Neighbors	17	5.7
	Friends& Colleagues	19	6.3
	Health Care	1	0.4
	Professionals	16	5.3
School Teachers			

Data were collected through home visits by interviewing every woman individually at her home to assess her knowledge toward domestic accidents. The average number interviewed was 2-5 case per day and average time taken for completing each sheet was around 20-40 minutes, this was depending on

the response of the women. A time span of 10 minutes for completing the demographic characteristics and 30 minutes for completing the questionnaire was given. Data were collected over a period of fifteen months starting from September 2009-December 2010. The filled in questionnaire was scored and a master sheet was prepared containing the scores of the 300 subjects on various dimensions of the tool. The data were coded and entered in the computer (Microsoft Excel) for statistical analysis. The obtained data were analyzed and tabulated, descriptive statistics as frequencies, percentage, mean and standard deviation were calculated using computer. Cross tabulation, "t" -test, ANOVA test, Correlation test and chi-square test were also used and P value less than or equal 0.05 were considered as statistically significant. Data were analyzed using SPSS (version 13) software.

RESULTS

The above table 2 reveals that 24.33% of the respondents had poor knowledge, 48% of the respondents had average knowledge and 27.66% of the respondents had good knowledge about prevention of domestic accidents among toddlers. Data on nature and types of domestic accidents show that 164 (54.7%) out of 300 population had average knowledge, 76(25.3%) of the population had adequate knowledge and 60(20%) of the population had inadequate knowledge. Data on first aid of domestic accidents show that, 146 (48.7%) of the population had average knowledge, 95(31.6) of the population had adequate knowledge and 59(19.7) population had inadequate knowledge.

Table 2. Frequency and Percentage Distribution of Women's Knowledge about Domestic Accidents

Score	Knowledge category	Frequency	Percentage
< 34	Inadequate Knowledge	73	24.33%
34-45	Moderate Knowledge	144	48%
>45	Adequate Knowledge	83	27.66%

Table 3. Frequency and Percentage Distribution of Women's Knowledge about Prevention of Domestic Accidents among Toddlers

Knowledge category	Inadequate Knowledge		Moderate Knowledge		Adequate Knowledge	
	F	%	f	%	f	%
Knowledge about Nature and Type of Domestic Accident	60	20	164	54.7	76	25.3
Knowledge about first aid measures for domestic accidents	59	19.7	146	48.7	95	31.6
Knowledge about prevention of domestic accidents	47	15.7	130	43.3	123	41

Data on prevention of domestic accidents show that 130(43.3%) of the population had average knowledge, 123(41%) population had adequate knowledge regarding preventive measures of domestic accident and 47(15.7%) of subjects had inadequate knowledge regarding preventive measures of domestic accident. Knowledge on domestic accidents seems to have significant association with age of the women, religion of the women, and family's monthly income of the women.

Table 4. Association between Knowledge and Demographic Variables of respondents

Variables	Category	Knowledge Category			χ^2	d.f	p-value
		Inadequate	Moderate	Adequate			
Age (years)	< 20	2	1	1	1.856	6	.932
	20-29	44	84	48			
	30-39	25	55	32			
	40-49	2	4	2			
Educational Status	Illiterate	2	0	1	26.18	6	.000**
	Primary School	5	16	8			
	Secondary School	49	69	26			
Occupation	Graduates	17	59	48	.955	2	.620
	Working	13	32	20			
Spouse Occupation	Not working	60	112	63	2.43	2	.297
	Working	73	140	82			
Religion	Not working	0	4	1	12.3	4	.015*
	Hindu	69	126	63			
	Christian	4	17	18			
Family Type	Muslim	0	1	2	1.25	2	.535
	Nuclear	53	105	55			
	Joint family	20	39	28			
Family's Monthly Income	<Rs. 2000	11	12	4	14.81	6	.022*
	2000-3000	10	17	10			
	3000-5000	23	26	15			
Number of Children	>Rs.5000	29	89	54	1.519	4	.823
	1	32	68	44			
	2	35	63	33			
Frequency of Accidents	3	6	13	6	2.367	4	.669
	0	30	47	33			
	<5	36	82	44			
Source of Information	>5	7	15	6	14.142	8	.078
	Self	38	71	35			
	Media	9	24	25			
	Parents and Relatives	9	23	13			
	Neighbors & Friends	13	15	8			
Others(Medical Professionals & Teachers)	4	11	2				

*P<0.05.

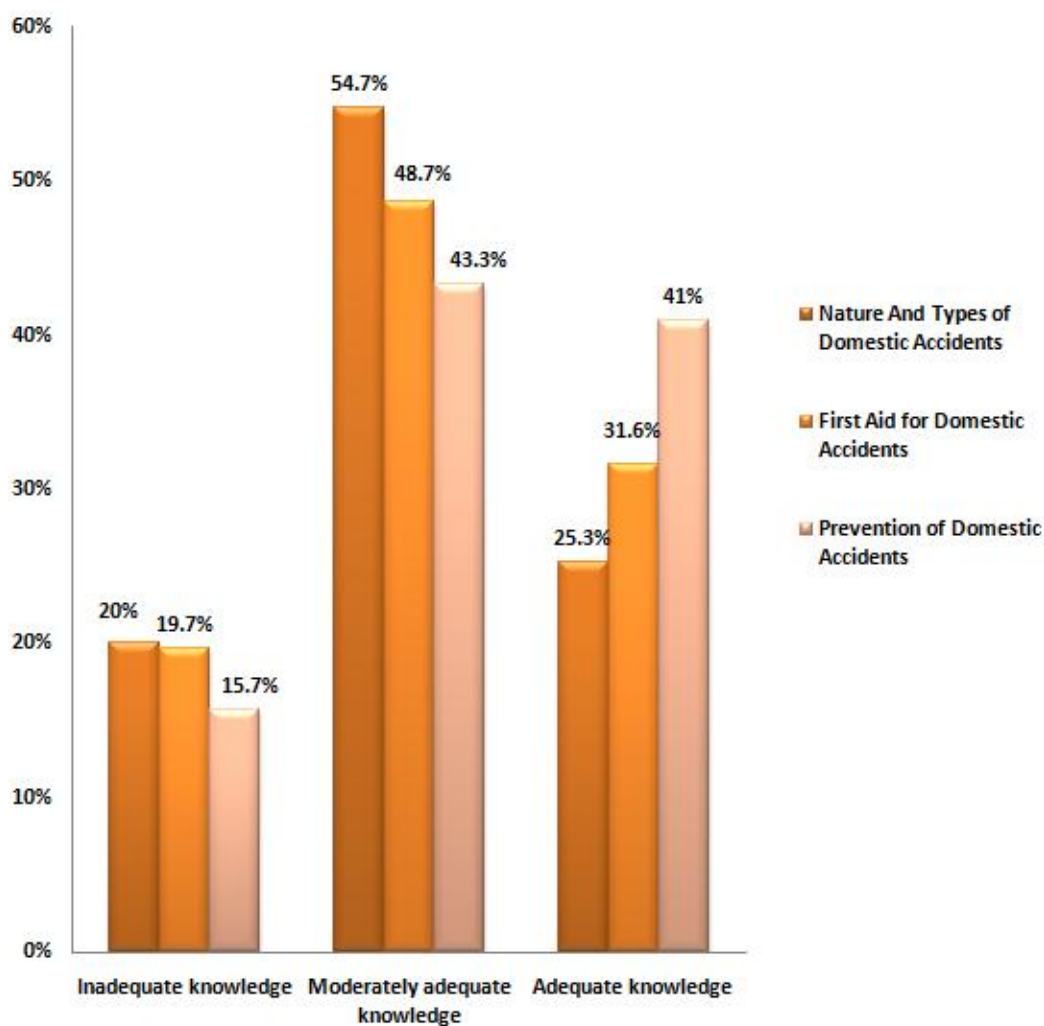


Figure 1. Comparison of Knowledge Between Different Aspects of Domestic Accidents

The above table 4 shows that educational status, religion, and family's monthly income of the sample are associated with their knowledge level.

Conclusion

Investigator concludes that, the present study revealed significant gaps in women's knowledge of certain child health matters especially prevention of domestic accidents and first aid management. It also revealed that health education in schools was deficient and it also exposed the limited involvement of health care personnel and institutions in health care education. There is a need for health education programs that target high school girls, university students, mothers and other caregivers (e.g. fathers). These should be delivered by trained personnel in classes, courses, and special sessions. In addition, health care facilities should be reformed to make health education an essential and compulsory part of health care delivery. Involvement in these educational activities should be a mandatory requirement for the issue of a license to practice. In summary, the results of this analysis demonstrated clearly that women in all communities needed a wide range of educational counseling about how to prevent accidents that injure children. This fact reemphasizes the necessity of continuing to devote public attention to this problem.

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Conflicts of interest

The author of this thesis did not receive any financial support or loan from anyone. Hence the author declares that she has no conflicts of interest.

Source of Funding- Self

Ethical clearance

The ethical clearance was obtained from the Doctoral committee of Mother Teresa Women's University. Oral consent was obtained from the samples before collection of data by explaining the purpose of this study and its importance for each woman.

After getting the oral consent, an explanatory letter and the questionnaire were handed out to the samples. The explanatory letter provided a credible and meaningful explanation of the research intention. The researcher remained with the participants, informing them of the strategies employed to protect their anonymity and other safeguards taken to protect their identities prior to publication. They were also assured that their responses would be kept confidential. The ethical principles of guaranteeing the principles of honesty, confidentiality, privacy, avoidance of harm and informed consent underpinned the total research process.

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