



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE OF FIRST AID FOR CHOKING AMONG THE MOTHERS OF UNDER FIVE CHILDREN IN SELECTED AREAS OF KAMRUP RURAL, ASSAM

MS Nazma Ahmed

Lecturer (Obstetrics and Gynaecological Nursing Speciality), NEMCARE Institute of Nursing Sciences, Mirza, Kamrup (R), Assam, India.

MS Jayashree Kakoti

Vice-principal (medical surgical Nursing Speciality), NEMCARE Institute of Nursing Sciences, Mirza, Kamrup (R), Assam, India.

ABSTRACT

Background Of The Study: First aid for choking is a life-threatening event in children that requires early diagnosis and prompt successful management. As it said 'prevention is better than cure', prevention is the most critical or key in reducing morbidity due to foreign body aspiration. Therefore more effort on caregivers education is essential. Hence it is important that the mother who is the strength of life, the rock of her family, they gentle heartbeat to her children, should be brave enough to deal in such emergency situation, as choking for more than 4 minutes without oxygen causes brain damage or even death. Depression or becoming panic does not work out in such emergency situations. **Aim:** To find out the effectiveness of structure teaching programme on knowledge regarding first aid of choking among the mothers of under 5 children. **Method:** Quantitative research approach was used, and pre-experimental one group pre-test post-test design was adopted in the study. The samples were collected using non-probability purposive sampling technique from 40 mothers. **Results:** Out of 40 mothers of under 5 children, with respect to age, 26(65%) were aged between 26 – 35 years, 9(22.5%) were aged between 21 – 25 years, 3(7.5%) were aged >35 years and 29(5%) were aged <20 years. Regarding education, 23(57.5%) had secondary education, 11(27.5%) had primary education, and 6(15%) were graduates. Considering the type of family of mothers of under 5 children, 21(52.5%) belonged to joint family and 19(47.5%) belonged to nuclear family. With regard to address, 40(100%) were residing in rural area. Regarding religion, 31(77.5%) were Hindus and 9(22.5%) were Muslims. The occupational status of mothers of under 5 children shows that, 35(87.5%) were homemakers, 4(10%) were private employee and 1(2.5%) were daily worker. With respect to family income, 28(70%) had a family income of 20,000, 8(20%) had family income of between 21,000 – 25,000, 3(7.5%) had a family income of >31,000 and 1(2.5%) had family income of between 25,000 – 30,000. It shows that in the pre-test, 21(52.5%) had moderately adequate knowledge and 19(47.5%) had inadequate knowledge regarding first aid of choking among mothers of under 5 children. In the post test, 22(55%) had moderately adequate knowledge and 18(45%) had adequate knowledge regarding first aid of choking among mothers of under 5 children. The calculated paired 't' test value of $t = 17.130$ was found to be statistically significant at $p < 0.001$ level which clearly infers that structured teaching programme on knowledge regarding first aid of choking administered among mothers of under 5 children was found to be effective in improving the level of knowledge regarding first aid of choking among mothers of under 5 children. **Conclusion:** Through this study, the investigator concluded that structured teaching programme was effective in bringing desired changes in the knowledge of the mothers of under five children.

KEYWORDS :

INTRODUCTION

Choking refers to a blockage of upper airways by food or other foreign bodies resulting in interruption of breathing. It is an actual life-threatening emergency that needs immediate action by anyone nearby the victims to save a life. Foreign bodies in the upper airways can cause acute obstruction leading to the onset of the respiratory distress. It is common in children who ingest objects as they pick up everything and place it in their mouth. Choking is among the most common cause of injury related morbidity and mortality specially under the age of 4 years. It is the major cause of illness and death in the paediatric population. Pre-school age children are at higher risk for the choking incident because their behaviour pre disposes them to eat. The choking incidents happens more frequently in young children as they play with the small items and put them in their mouth that may easily lodge into their airways resulting in an obstruction.

Choking as a foreign body obstruction is a phenomenon that occurs when breathing is impaired by a blockage inside of the throat or windpipe, resulting in oxygen deprivation although oxygen stored in the blood and lungs can keep a persons alive for several minutes after breathing stops. Choking often leads to death. It is a medical emergency that requires fast action to clear the airway and protect the person from further harm.

In India, prevalence of choking is very high due to lack of knowledge regarding prevention and first aid management for choking among mothers. So it is very much important to educate the mothers regarding prevention and management of choking because mothers are the main caregiver for the children.

OBJECTIVES OF THE STUDY:

1. To assess the knowledge regarding first aid of choking among the mothers of under 5 children before and after the administration of structured teaching programme.
2. To determined the effect of structure teaching programme on knowledge regarding first aid of choking among the mothers of under 5 children.

3. To find out the association between pre-test knowledge with selected demographic variables among the mothers of under 5 children.

REVIEW OF LITERATURE

1. David T. Chang et.al(2021) A descriptive study was conducted investigating intentional nonfatal and fatal choking injuries in children aged 0-19 years using national data from 2001 to 2016 through centre for disease control and prevention's WISQARS & WONDER databases focusing on the 6 years prior and 6 years after release of the AAP's recommendations. Results showed that from 2001 to 2016 there were a total of 305,814 nonfatal injuries and 2347 choking deaths in children from 0-19 years. Children under five years of age accounted for 73% of nonfatal injuries and 75% of choking fatalities. The results also showed that there is a significant increase in nonfatal injuries rate when comparing 2005-2010 and 2011-2016 (19/100,000 versus 26/100,000, respectively) there was a decrease in the choking fatalities rate in all children (0.18/1000,000 versus 0.16/100,000, respectively) but no change in fatalities rate for children under five. The study concluded that overall rate of nonfatal choking injuries increased, while rate of choking fatalities in children decreased after 2010. However, the choking fatalities rate in 0-4 years olds, the highest risk group did not change. The study also suggested that we must continue to educate and raise awareness of choking injuries with targeted efforts to address racial disparities.

2. Kholod A habeeb and Ghada Alarfaj 2020, A cross-sectional study was conducted to determine the parents awareness level regarding choking first aid and their readiness to attend an FA course and solutions from their perspective to improve the awareness level regarding FA for children. A total three hundred parents attending well baby clinic in Wazarat primary health care centre were selected. A chi-square test, generated by SPSS, was used. The result shows that only 6% of the parents have a high and acceptable awareness level regarding choking. A lot of myths and incorrect practice are prevalent among parents regarding the management of choking. Fortunately two thirds of the participants (78%) are willing to and first aid course and 79% of them think that adding first aid to school subject is the solution for awareness improvement. The study suggest that parent knowledge

level regarding first aid method of major home injuries are insufficient, therefore, more attention should be focused to improve the parents knowledge and skills of first aid in order to reduce morbidity, mortality from these injuries.

RESEARCH METHODOLOGY

Research Approach: Quantitative research

Research Design: Pre experimental one group pre-test post-test design.

Variables:

Dependent Variables: Knowledge

Independent Variables: Structured teaching programme

Demographic Variables: In this study, the demographic variables are age, educational status, type of family, place of residence ,religion, family income.

Setting Of The Study: investigator's choice.

Due to the feasibility of the study and availability of the sample, the study was conducted in two (2) selected areas of Uparhali, Mirza, Kamrup (R), Assam. The name of the selected areas are-

- Uparhali Anganwadicentre
- Saraswati Public Academy Uparhali

Population: Mothers.

TARGET POPULATION

All the mothers of under-five children in selected area of Kamrup (R), Assam.

ACCESSIBLE POPULATION

The mothers of under five children of selected area at Kamrup (R), Assam.

According to Kothari, sample may be defined as a representative unit of target population. Sample for the present study were mothers of the under five children in selected areas of Mirza, Kamrup (R), Assam.

Sample Size: 40

Sample And Sampling Technique: Non-probability convenience sampling technique.

Criteria For Selection Of Sample:

Inclusion Criteria:

- Mothers who are willing to participate
- Mothers of the under five children
- Mothers who can read and write Assamese.

Exclusion Criteria:

- Mothers who are not willing to participate
- Mothers who have children more than five years of age.
- Mothers who cannot read and write Assamese.

Tools And Techniques:

Structured knowledge questionnaire was used to assess the level of knowledge and the technique was self-report.

Scoring Key:

The correct answer was given score of 1(one) and wrong score 0 (zero). The total score was 20.

Category Of Knowledge Level:

Inadequate knowledge:<50%(<10)

Moderate knowledge:50-75%(10-15)

Adequate knowledge:>75%(>15)

Content Validity Of The Tool:

The prepared instrument along with the problem statement and objectives was submitted to four (4) experts: 2 Nursing experts in the field of child health Nursing. 1 Nursing experts in the field of Medical Surgical Nursing. 1 Medical expert in Obstetrics and Gynaecological Department for establishing the content validity.

Ethical Consideration:

1. Written permission from the Child Development Project Officer,

Uparhali, Kamrup(R), Assam was obtain before starting the final data collection procedure for the study.

2. Written permission from the senior Medical Officer, CHC Mirza, Kamrup (R), Assam.

3. Written permission from the principal of Saraswati Public Academy, Uparhali, Kamrup (R), Assam was obtain before starting the final data collection procedure for the study

4. The subjects were assured of confidentiality and anonymity of the data obtained.

5. Participants had the liberty to leave the study at any point of time as they desired.

6. The study utilized non invasive procedure and it was ensured that there would be no physical or psychological harm to the participants.

RESULTS:

Table-1: Frequency And Percentage Distribution Of The Mothers According To Demographic Variables

VARIABLES		Frequency (f)	Percentage (%)
age	<20	2	5
	21-25	9	22.5
	26-35	26	65
	>35	3	7.5
Education	Illiterate	-	-
	Primary education	11	27.5
	Secondary	23	57.5
	Graduation	6	15.0
Type of family	Nuclear	19	47.5
	Joint	21	52.5
Address	Rural	40	100.0
	Urban	-	-
Religion	Hindu	31	77.5
	Muslim	9	22.5
	Christian	-	-
	Others	-	-
Occupation	Homemaker	35	87.5
	Govt. Job	-	-
	Private employee	4	10.0
	Daily worker	1	2.5
FAMILY INCOME	20,000	28	70.0
	21,000 – 25,000	8	20.0
	25,000 – 30,000	1	2.5
	>31,000	3	7.5

Table-2: Frequency And Percentage Distribution Of The Mothers According To The Level Of Knowledge

Level of knowledge	Inadequate		Moderate		Adequate	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Pre test knowledge	19	47.5	21	52.5	0	0
Post test knowledge	0	0	22	55	18	45

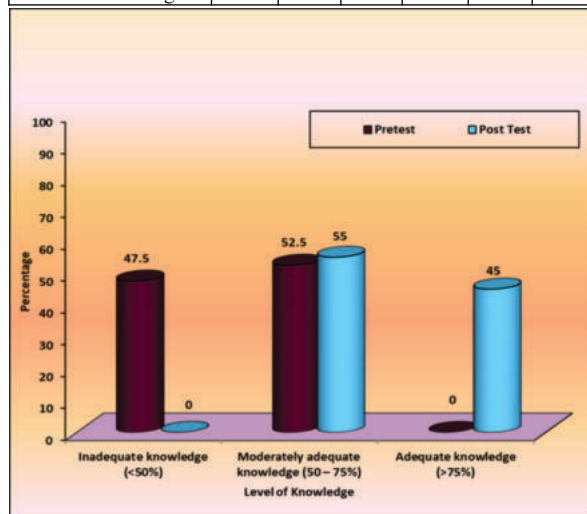


Figure-1: Bar Diagram Showing Percentage Distribution Of The Mothers Pre Test Knowledge Score And Post Test Knowledge Score

Table-III: Mean , Standard Deviation, Mean Difference And Paired T-test Of Knowledge Regarding First Aid Of Choking Among Mothers Of Under 5 Children.

Knowledge	Mean	S.D	Mean Difference & %	Paired 't' test & p-value
Pre test	9.90	2.12	5.45 (27.2%)	t=17.130
Post Test	15.35	1.64		p=0.0001, S***

S- Significance,

Table- IV: Association Of Pre-test Knowledge With Selected Demographic Variables

Demographic Variables	Inadequate		Moderately Adequate		Adequate		Chi-Square Test & p-value
	No.	%	No.	%	No.	%	
Age							$\chi^2=6.532$
<20	2	5.0	0	0	-	-	d.f=3
21 – 25	3	7.5	6	15.0	-	-	p = 0.088
26 – 35	11	27.5	15	37.5	-	-	N.S
>35	3	7.5	0	0	-	-	
Education							$\chi^2=0.703$
Illiterate	-	-	-	-	-	-	d.f=2
Primary education	6	15.0	5	12.5	-	-	p = 0.704
Secondary	11	27.5	12	30.0	-	-	N.S
Graduation	2	5.0	4	10.0	-	-	
Type of family							$\chi^2=6.532$
Nuclear	13	32.5	6	15.0	-	-	d.f=1
Joint	6	15.0	15	37.5	-	-	p = 0.012
Address							S*
Rural	19	47.5	21	52.5	-	-	
Urban	-	-	-	-	-	-	
Religion							$\chi^2=0.043$
Hindu	15	37.5	16	40.0	-	-	d.f=1
Muslim	4	10.0	5	12.5	-	-	p = 0.835
Christian	-	-	-	-	-	-	N.S
Others	-	-	-	-	-	-	
Occupation							$\chi^2=1.933$
Homemaker	17	42.5	18	45.0	-	-	d.f=2
Govt. Job	-	-	-	-	-	-	p = 0.380
Private employee	1	2.5	3	7.5	-	-	N.S
Daily worker	1	2.5	0	0	-	-	
Family income							$\chi^2=1.380$
20,000	13	32.5	15	37.5	-	-	d.f=3
21,000 – 25,000	4	10.0	4	10.0	-	-	p = 0.710
25,000 – 30,000	0	0	1	2.5	-	-	N.S
>31,000	2	5.0	1	2.5	-	-	

NS- Non-significance, S- Significance, df- Degree of freedom

CONCLUSION:

Based on the analysis of the findings of the study, the following inference were drawn. The knowledge on first aid for choking out of 40 mothers, in the pre test It shows that majority i.e, 21(52.5%) had moderately adequate knowledge and 19(47.5%) had inadequate knowledge regarding first aid of choking among mothers of under 5 children. In the post test, 22(55%) had moderately adequate knowledge and 18(45%) had adequate knowledge regarding first aid of choking among mothers of under 5 children. The mean knowledge score in pre-test was 9.90 with standard deviation 2.12. In post test the mean knowledge score was 15.35 with standard deviation 1.64. The calculated paired 't' test value of t=17.130 was found to be statistically highly significant at p<0.0001 level. This shows that there was significant difference between the pre-test and post-test scores of knowledge, which clearly infers that STP on knowledge regarding first aid for choking among the mothers of under five children was found to be effective in improving the level of knowledge among the mothers in the post-test.

REFERENCES:

- Sharma SK. "Nursing research and statistics", 2nd edition published by Elsevier India Pvt. Ltd; 2014.
- Polit DF, Hunglar BP. Nursing Research, 6th edition Philadelphia: Lipincodtt; 2012.
- Basavanthapa B.T "Nursing Research" 2nd edition published by Jaypee Brothers pvt ltd. 2007
- Basavanthapa B.T "Nursing Research" 3rd edition published by Jaypee Brothers pvt ltd. 2014.
- P. Seenidurai, Introduction to Nursing Research 1st edition published by Jaypee

Brothers pvt Ltd. 2014.

- Polit DF, Beck CT "Nursing Research Generating and Assessing Evidence for Nursing Practice published by Wolters Kluwer (India) pvt Ltd. 11th edition
- Basic life support provider manual, 2020, published by American Heart Association.
- J.MarilynHockenberry, Wilson David, "WONG'S Essential of pediatric Nursing"8th edition published by Elsevier, a division of Red Elsevier India pvt.Ltd.page no: 781, 809-810.
- Ghai OP, Paul Vinod, BaggaArvind, "GHAI Essential Pediatrics," 7th edition(2010) published by CBS publishers an Distributor (P) Ltd. Page no: 367, 386.
- DuttaParul, " Pediatric Nursing" 4th edition published Jaypee brothers publishers pvt.Ltd. Page no: 367, 386