

Knowledge on use of Diaper and its Impacts on Child Health among Mothers of Newborn

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Abstract-- The present study aims to assess the knowledge on use of diaper and its impacts on child health among mothers of newborn. The objectives of the study was to assess the knowledge on use of diaper and its impacts on child health among mothers of newborn and to find out the association between the knowledge on use of diaper and its impacts on child health among mothers of newborn and selected socio personal variables. Non experimental descriptive study design was used in the study. The data was collected by using a semi structured questionnaire. The collected data was analyzed by using descriptive and inferential statistics. The result shows that out of 30 samples majority of the age of newborn 1 – 5 days (23%), 6 – 10 days (34%), 11 – 15 days (10%), 16 – 20 days (33%), majority of the sex of newborn in male (20%), female (80%), majority of the birth order in first born (91%), second born (3%), third born (6%), majority of age group of mothers 21 – 25 years (70%), 26 – 30 years (27%), 31 – 35 years (3%), majority education of mother in graduate (30%), , SSLC (70%), majority of occupation of mother in government job (23%), private job (33%), self employee(7%), housewives (37%), majority previous exposure doesn't have diaper rash (100%).

There is a significant association between the ages of mother, occupation of mother and there is no association between age of newborn, sex, birth order, education of mother, income of family, type of diaper used, duration of diaper used, and previous exposure to diaper rash.

Keywords-- Knowledge on use of diaper, impact on child health, mothers of newborn

I. INTRODUCTION

The birth of a newborn is one of the most grandiose and warm hearted events for the family. "There is nothing as powerful as mothers love and nothing as healing as a child's soul". Children are the most valuable resources to the society. The newborn health must be observed and protected from the day conception. The mother observe their babies carefully and are often worried by minor physical changes, which may be of no consequences. The newborn skin undergoes lots of changes in color and texture.

A diaper is an absorbent material commonly used on newborn and infants who are incontinent and unable to reach the toilet when needed. Commonly diapers are used in children until they are potty trained.

At present the demand for the commercial diapers has increased and comfort realized by mothers. Rashes and redness may be observed on the delicate skin of the regions most likely to be diagnosed among newborn between 1 – 28 days of age. The symptoms are red rashes with different degree looking almost scalded to the skin around the genitals and buttocks of the newborn. The causes of diaper rash includes fungal, bacterial, viral, prolonged exposure to stool and urine, delicate skin, strong detergent used by care taker to wash the diaper, digestive disturbance for the newborn. Diaper dermatitis affects newborn and infants on diapers without any gender preference.

In India diaper rashes are commonly found during newborn stage itself. Prevalence has been reported from 6 – 40% in 1 – 28 days of life disposable diapers are not environmentally friendly, but are extremely convenient to use, easily available and the need to worry about leakage is very minimum.

Statement Of The Problem

A study to assess the knowledge on use of diaper and its impacts on child health among mothers of newborn.

II. OBJECTIVES

- ❖ To assess the knowledge on the use of diaper and its impacts on child health among mothers of newborn by using a semi structured questionnaire.
- ❖ To find out the association between the knowledge on use of diaper and its impacts on child health among mothers of newborn and selected demographic variables.

III. METHODOLOGY

A quantitative research approach with non-experimental descriptive research design was adopted for this study. The sample size of 30 mothers of newborn who fulfilled research selection criteria where selected using non probability convenient sampling technique. The study was conducted in Neonatal Intensive Care Unit (NICU) in Government Mohan Kumaramangalam Medical College and Hospital, Salem.

The research tool comprised of socio personal variables, semi structured questionnaire and was used to assess the knowledge of mothers of newborn regarding the impacts of diaper use. A semi structured questionnaire was used to evaluate the level of knowledge regarding impacts of diaper use among mothers of newborn. The data was collected on the month of August 2026 for one day among the mothers of newborn GMKMCH, Salem after obtaining the formal permission. The researcher introduced herself and explained and purpose research to the mothers of newborn.

The mothers were assembled and explained about the research tool and methods to respond to each tool in detail gaining the cooperation from the mothers. A semi structured questionnaire regarding its health impact of diaper use was distributed among mothers of newborn at GMKMCH, Salem.

IV. RESULT AND DISCUSSION

The findings were analyzed based on the objectives of the study.

Section A: Description Of The Demographic Variables Among Mothers Of Newborn.

Frequency and percentage distribution of demographic variables among mothers of newborn.

SL.NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	Age of newborn		
	1 – 5 days	7	23%
	6 – 10 days	10	34%
	11 – 15 days	3	10%
	16 – 20 days	10	33%
	21 – 28 days	0	-
2.	Sex of newborn		
	Male	6	20%
	Female	24	80%
3.	Birth order		
	First born	27	91%
	Second born	1	3%
	Third born	2	6%
4.	Age group of mother		
	21 – 25	21	30%
	26 – 30	8	3%
	31 - 35	1	70%
5.	Education of mother		
	Graduate	9	30%
	Post graduate	0	-
	SSLC	21	70%
6.	Occupation of mother		

	Government job	7	23%
	Private job	10	33%
	Self employee	2	7%
	Housewife	11	37%
7.	Previous exposure to diaper rash		
	Previous exposure to diaper rash Yes/ no	30	100%
	Exposure to diaper rash	0	-

Majority of the age of newborn 1 – 5 days (23%), 6 – 10 days (34%), 11 – 15 days (10%), 16 – 20 days (33%), majority of the sex of newborn in male (20%), female (80%), majority of the birth order in first born (91%), second born (3%), third born (6%), majority of age group of mothers 21 – 25 years (70%), 26 – 30 years (27%), 31 – 35 years

(3%), majority education of mother in graduate (30%), , SSLC (70%), majority of occupation of mother in government job (23%), private job (33%), self employee (7%), housewives (37%), majority previous exposure doesn't have diaper rash (100%).

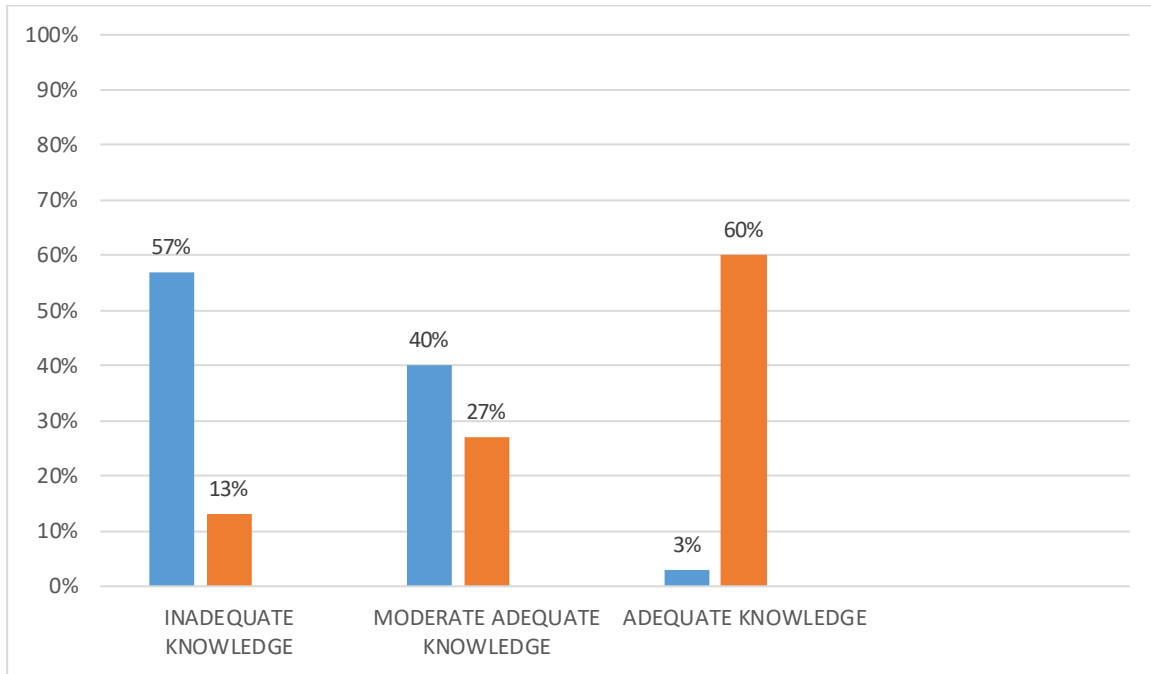
Section B: Assess The Level Of Knowledge Among The Mothers Of Newborn.

Frequency and percentage distribution of pretest and posttest of the level of knowledge among mothers of newborn.

SL. NO	LEVEL OF KNOWLEDGE	PRE TEST		POST TEST	
		FREQUENCY	%	FREQUENCY	%
a)	Inadequate (1 – 10)	17	57%	4	13%
b)	Moderate Adequate (11 - 20)	12	40%	8	27%
c)	Adequate (21 - 30)	1	3%	18	60%

In pretest majority of the mothers with newborn 57% had inadequate knowledge, 40% had moderate adequate and 3% had adequate knowledge.

In posttest majority of the mothers with newborn 13% had inadequate knowledge, 27% had moderate adequate knowledge and 60% had adequate knowledge.



Section C: Assess The Effectiveness Of Semi Structured Questionnaire On Knowledge Regarding Mothers Of Newborn.

Paired t-test value of pretest and posttest knowledge score of mothers regarding diaper usage.

Level	t-value	df	Table value	p-value	Inference
Knowledge	13.04	29	2.05	P<0.05	significant

This table shows that the paired t-value was calculated to analyze the effectiveness between pre and post knowledge score of mothers of newborn.

The paired t-value for knowledge was 13.04 which is higher when compared with table value 2.05 at 29 degree of freedom. The semi structured questionnaire to mothers was significantly effective.

Frequency on mean and standard deviation of knowledge score of mothers of newborn regarding diaper usage.

AREA OF ANALYSIS	MEAN	STANDARD DEVIATION
Pre test	10.7	3.42
Post test	22.6	7.22

The above table clearly indicates that the overall mean score of pretest knowledge is 10.7 and standard deviation is 3.42 of mothers regarding diaper usage whereas in posttest

the overall mean score is 22.6 and standard deviation is 7.22 of mothers regarding diaper usage of the mothers knowledge was increased in posttest.

SL NO	VARIABLES	LEVEL OF KNOWLEDGE				
		X ² value	df	table value	p-value	Inference
1	Age	0.00	3	7.815	>0.05	Non-significant
2	Gender	2.14	2	5.991	>0.05	Non-significant
3	Marital status	0	2	3.84	1	Non-significant
4	Religion	0.74	4	9.488	>0.05	Non-significant
5	Education	7.13	10	18.31	>0.05	Non-significant
6	Blood group	8.81	8	15.507	>0.05	Non-significant
7	Types of health information resources	6.91	6	12.59	>0.05	Non-significant
8	Area	0.87	4	9.49	>0.05	Non-significant

V. CONCLUSION

The present study of the effectiveness of semi structured questionnaire among mothers of newborn in a selected hospital in GMKMCH, Salem.

The result shows in pretest majority of the mothers with newborn 57% had inadequate knowledge, 40% had moderate adequate and 3% had adequate knowledge.

In posttest majority of the mothers with newborn 13% had inadequate knowledge, 27% had moderate adequate knowledge and 60% had adequate knowledge.

The result of the study showed that semi structured questionnaire was effective in improving the knowledge on mothers of newborn.

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