

# A Study to Assess the Awareness of Mothers regarding Diaper Related Problems Including Management and Diaper Hygiene Practices among Mothers of Diaper Wearing Children (0 to 2 Years) in Selected Areas of Faridkot, Punjab, India

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**Abstract:** Aim of the study is to assess the awareness of mothers regarding diaper related problems including management and diaper hygiene practices among mothers of diaper wearing children (0 to 2 years) in selected areas of Faridkot, Punjab, India. Objectives have been set to assess the awareness of mothers regarding diaper related problems including management and practices regarding diaper hygiene. Different socio demographic variables i.e., age, gravida of mother, education, occupation of mother, Income of family, type of family, area of living, and previous awareness of mother regarding diaper hygiene are selected to determine the association of awareness of mothers regarding diaper hygiene practices. The study was descriptive survey in nature. Structured self-administered tools i.e., socio-demographic variables, knowledge questionnaires and practice checklist were used gather data form 200 mothers of infants wearing diaper (0-2 years) regarding diaper dermatitis and prevention practices were developed by tool validation and experts' suggestions. Written permission was obtained from the ethical committee and board of research studies Form College and also from the authorities of the hospital. The written consent was obtained for the samples. The 200 samples were selected by convenient sampling technique. The pilot study was conducted on 20 samples before the final study. The desired and necessary changes were made in before conducting main study. This study can further benefit the women especially in proper caring of kids regarding awareness on diaper dermatitis which would ultimately benefit the overall health related aspects of new born babies.

**Keywords:** Diaper dermatitis, Allergic, Rashes, Diaper hygiene, Awareness, prevalence and risk factors etc.

## 1. Introduction

Diaper problem is one of the most common skin infections in infants and toddlers. It is commonly caused by irritation on the diaper area. The rash is usually evident on the abdomen, genitalia and inside the skin folds of the thighs and buttocks and affects infants between the ages of 4 and 15 months. The severity can be mild to extreme, in some cases containing open sores or a secondary infection. Inflammation occurs as a result of prolonged exposure to irritants such as urine, stool and chemicals<sup>1</sup>. Diaper Dermatitis has been wrongfully labeled as a sign of poor parental skills and child neglect. This explains the blushes and desperation in parents whenever a child suffers from diaper dermatitis. This misunderstanding around Diaper Rash has led to ill-advised mothers combing through lists of purported remedies with little success. Treatment failure is common because the effective management of Diaper Rash requires the recognition and control of predisposing factors. The use of medical remedies has little chance of success without concomitant control of predisposing factors<sup>2</sup>.

In India, diaper rash is the most common dermatitis found in infancy. Prevalence has been variably reported from 4-35% in the first 2 years of life. Incidence triples in babies with diarrhea. It is not unusual for every child to have at least 1 episode of diaper rash by the time he or she is toilet-trained. Because fewer than 10% of all diaper rashes are reported by the family, the actual incidence of this condition is likely underestimated, if clinic visits are used as the screening site. Care and prevention of diaper dermatitis can present a challenge for pediatric nurses and care providers. This

disease is usually not life threatening. However, it may cause significant distress for parents. Morbidity for the child is mostly in the form of pain and itching in the affected areas<sup>9</sup>. During my clinical posting B. Sc Nursing and M. Sc(N) came in OPD and whose children were admitted in ward having diaper rashes and related problems with diaper. When I was interacted with mothers and the queries asked by the mothers related to rashes, I was assumed that mothers are lacking in their knowledge regarding diaper hygiene and related practices. So, this influenced the investigator to take this study to assess the awareness of mothers regarding diaper related problems including management and diaper hygiene practices among mothers of diaper wearing children in selected areas of Faridkot, Punjab, India.

## 2. Background

Different studies have been conducted related to diaper dermatitis varying with region, age, awareness, quality of life etc. showing varying outcome. One study found skin of the new-born is immature at birth and vulnerable to contaminants that may cause diaper dermatitis<sup>8</sup>. A cross sectional study conducted to measure the prevalence of diaper dermatitis and identify risk factors associated with it in China. The findings suggest that 43.8% had diaper dermatitis in the 6 weeks. Multivariate logistic regression shown that the risk of diaper dermatitis was significantly decreased by solid foods, home location and frequency of diaper dermatitis and risk was increased with diarrhea<sup>6</sup>. Study in a peer reviewed journal stated that almost 30% of mothers reported diaper need. Hispanic women were significantly more likely to report diaper need than African

American women (odds ratio [OR]: 1.96; 95% confidence interval [CI]: 1.51–3.33), and women  $\geq 45$  years of age were significantly more likely than women between the ages of 20 and 44 years to report diaper need (OR: 2.53; 95% CI: 1.21–5.28)<sup>7</sup>. Studies have identified certain conditions that increase neonates' susceptibility to diaper dermatitis, including high humidity, maceration, contact with urine and feces, and friction<sup>5</sup>. The presence of diaper dermatitis has been found to be associated with discomfort, irritation, and pain, which affects neonates quality of life. At the same time, an irritable baby may create stress to care givers, thus reducing the bonding between the baby and his or her caregiver<sup>4</sup>. Another investigated the prevalence of nappy rash among babies aged 0 to 36 months. The study concludes that nappy rashes should be addressed carefully to treat the skin problems effectively<sup>12</sup>. a study conducted on assessment of effect of breast milk on diaper dermatitis. The study concludes that breast milk on healing of diaper dermatitis can be educated to mothers<sup>13</sup>. A detailed study concluded that the prevalence of diaper dermatitis was 36.1%, a rate which significantly decreased with age<sup>3</sup>. Diaper dermatitis prevalence and severity has been revealed in a study. It was a cross sectional study did on 1791 infants between the age of 2-8 months. The study concluded that least use of diaper will help to reduce the diaper dermatitis<sup>11</sup>. Mother's knowledge regarding newborn care and associated health problems indicated awareness factors in diaper dermatitis. The study concludes that there was need for education interventions<sup>14</sup>. Another identified the

prevalence of diaper dermatitis and associated factors in day care centers<sup>10</sup>. It was seen that prevalence of diaper dermatitis during the study period was 17.2%.

### 3. Methodology

#### a) Conceptual framework

##### Modified Conceptual Framework based on Rosenstock's (1974), Becker's (1978) Health Belief Model

According to Conner and Norman (1996) the health belief model has been applied in the areas like preventive health behavior which include health promoting and health risk behavior. The conceptual framework for this study is based on health belief model. Health beliefs are person's ideas and attitudes about health and illness. They may be based on factual information or wrong information. The health belief usually results from within a person. So the investigator felt that this model is suitable as conceptual framework for this study to assess the knowledge and attitude of female students regarding effects of cosmetic procedure on health.

The model describes about three variables;

- 1) Individual perception
- 2) Modifying factors
- 3) Likely hood of taking action

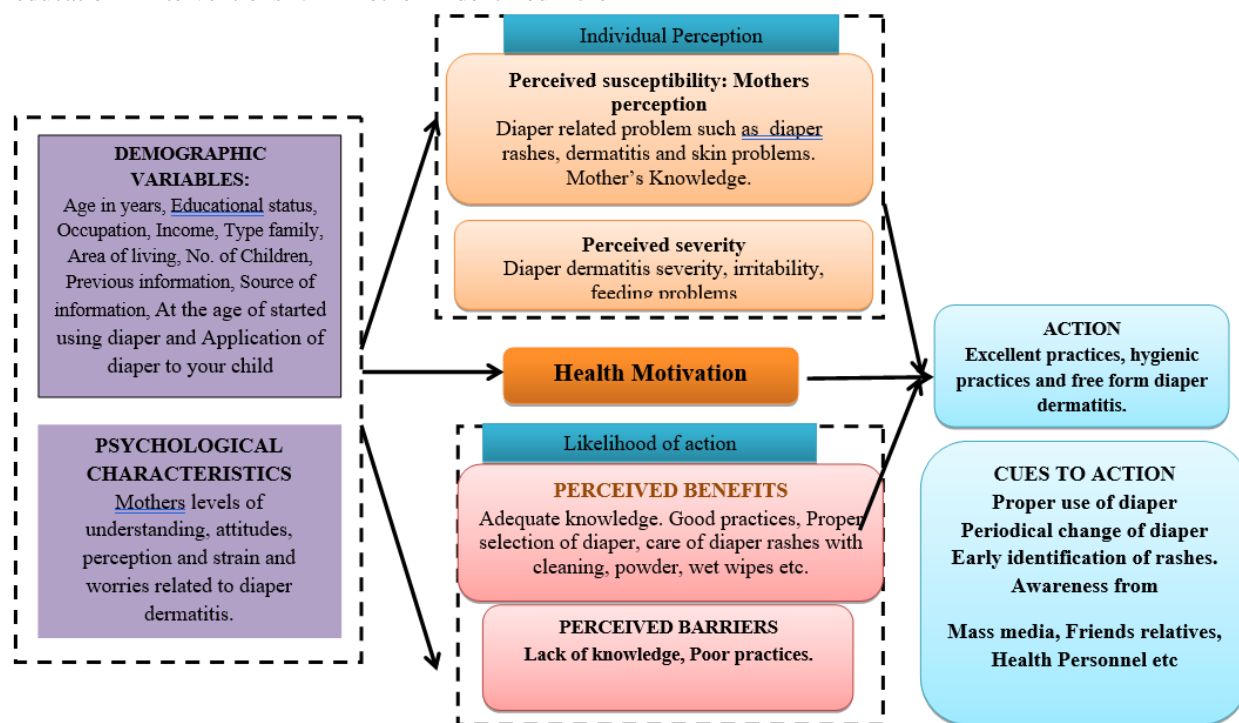


Figure 1: Rosenstock and Becker health belief model

#### b) Research design

Burns Grove N (2002) quoted that the research design refers to the researcher's overall plan for obtaining answers to the research question and its spells out strategies that the researcher adopted to develop information that is accurate, objective and interpretable. Research design is the conceptual structure within which research is conducted. Researcher's overall plan for obtaining answers to the

research questions or for testing the research hypothesis is referred as the research design. A research design helps the researcher in selection of subjects for study and determines the type of analysis to be used to interpret the data. The selection of research design depends upon the purpose of the study and conditions under which the study is conducted. The descriptive survey design was used to assess the awareness of mothers regarding diaper related problems

including management and diaper hygiene practices among mothers of diaper wearing children (0-2years) in selected areas of Faridkot, Punjab.

• **Setting of the study**

The study subjects were selected from the selected Areas ( play ways , crutches, Opd) of District Faridkot, Punjab, India.

• **Target Population**

The target population for the present study is mothers of diaper wearing children (0-2 years) of District Faridkot, Punjab, India.

• **Sample**

A sample consists of a subset of the units that comprises the population is mothers of diaper wearing children (0-2

years)

• **Sample Size**

The sample size was 200 mothers of diaper wearing children (0-2 years)

• **Sampling Technique**

The convenient sampling is a type of non-probability sampling method in which the researcher selects the subjects for the study to fulfill the study purpose.

Sampling is the process of selecting a portion of the population to represent the entire population. In this study the convenient sampling technique was used to collect data from the available samples falling under inclusion criteria.

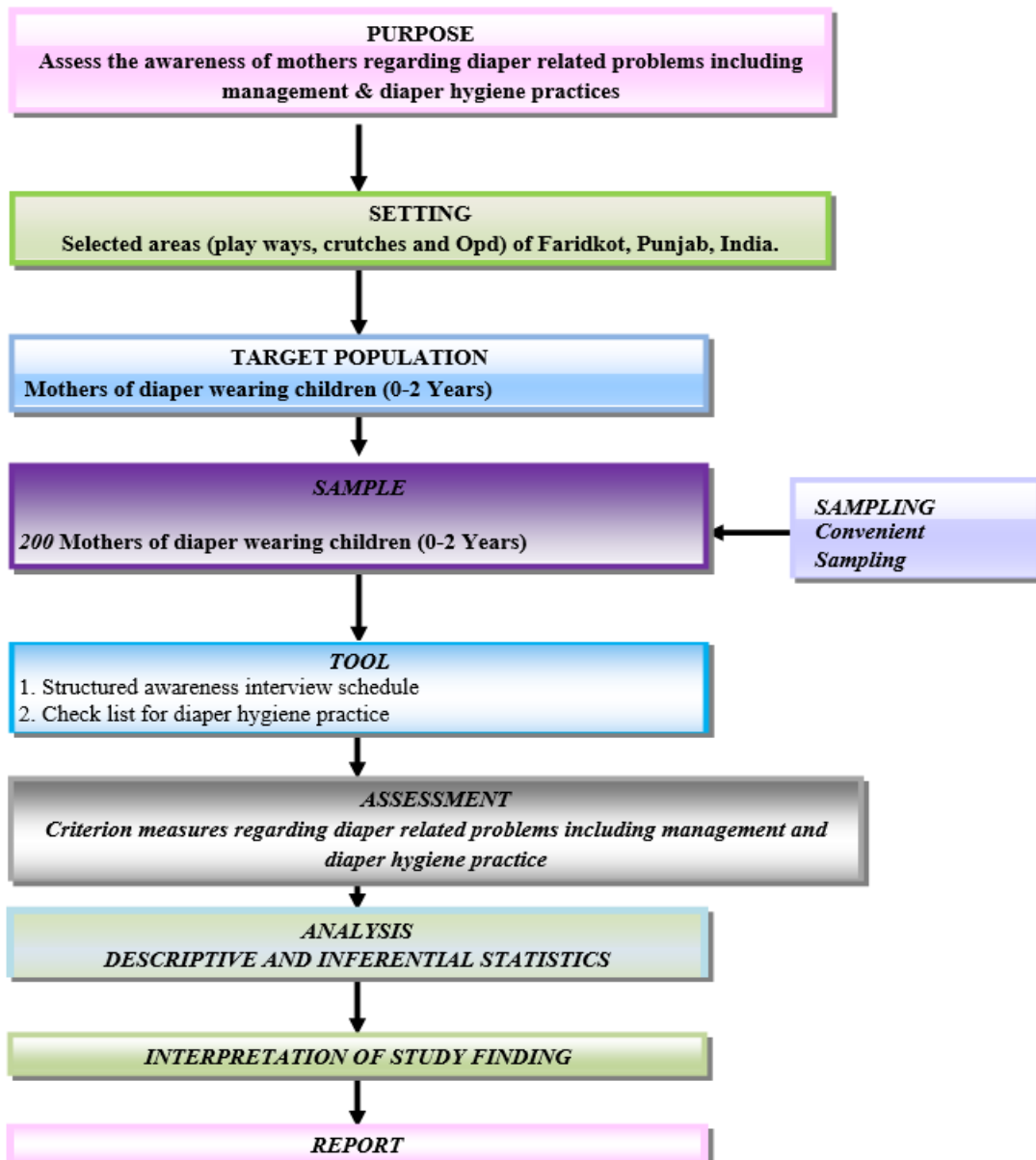


Figure 2: Schematic representation of research design

4. Results and Discussions

4.1 Procedure for data collection

A formal written permission was obtained from concerned authorities of educational institutions of Faridkot district, Punjab to conduct the study. The data was collected by using

structured awareness interview schedule and check list from 26/12/2019 to 25/01/2020 the investigator personally visited the mothers of diaper wearing children (0-2 years) and explained the purpose of the study and collected data from subjects who were interested and willing to participate in the study. They were assured of anonymity and confidentiality. Number of samples selected per day was 10.

The findings are organized and presented as follows:

- a) Description of socio-demographic variables of mothers.
- b) Assessment of awareness of mothers regarding diaper related problems and including management.
- c) Assessment of mother’s practices regarding diaper hygiene.

- d) Correlation between the awareness and practices related to diaper related problems.
- e) Association between awareness and practices with selected socio demographic variables.

**Section (a): description of socio-demographic variables of mothers.**

**Table 1:** Classification of samples based on their demographic variables, N=200

Sl. No	Demographic variable	Frequency	Percentage	
1	Age in years	18-24 years	49	24.5
		25-30 years	94	47.0
		31-36 years	52	26.0
		37-42 years	5	2.5
2	Educational status	Illiterate	29	14.5
		Up to primary school	36	18.0
		Up to secondary	36	18.0
		Senior secondary	30	15.0
		Graduation and above	69	34.5
3	Occupation	House wife	152	76.0
		Laborer	13	6.5
		Govt. employee	18	9.0
		Private employee	17	8.5
4	Income	≥10000	100	50.0
		10001-20000	40	20.0
		20001-30000	16	8.0
		30001-40000	14	7.0
		Above 40001	30	15.0
5	Type of family	Nuclear	81	40.5
		Joint	115	57.5
		Extended	4	2.0
6	Area of living	Rural	132	66.0
		Urban	68	34.0
7	No of children	One	86	43
		Two	78	39
		Three	23	11.50
		Four and above	13	6.50

**Table 2:** Classification of samples based on their demographic variables, N=200

S No	Demographic variable	Frequency	Percentage	
8	Previous awareness	Yes	133	66.50
		No	67	33.50
9	Source of information	Physician	34	17
		Chemist	15	8
		Friends/Relatives	41	21
		Staff Nurse	44	22
		Media	66	33
10	At the age of started using diaper	At birth	113	56.5
		3 months	40	20
		6 months	28	14
		1 year	19	9.5
11	Application of diaper to your child	During day time	10	5.0
		During Night time	58	29
		Both during day and night time	90	45
		During out visit only	42	21

**Table No. 1**

The above table describes the frequency and percentage distribution of samples. With regard to the age in years, majority of the subjects 94(47%) were in the age group of 25-30 years, followed by 52(26%) were in the age group of 31-36 years, followed by 49(24.5%) were in the age group of 18-24 years and left are 5(2.5%) were in the age group of 37-42 years.

With regard to the educational status, majority of the subjects 69(34.5%) were graduation and above, followed by 36(18%) were primary school, 30(15%) were senior secondary, 29(14.5%) were illiterate and 36(18%) were had up to secondary.

In relation to the occupation majority of the subjects 152(76%) were house wives, followed by 18(9%) were Govt. employee, followed by 17(8.5%) were private employee and remaining 13(6.5%) were laborer.

With regard to the income of family majority of the subjects 100(50%) were had less than and equal to Rs. 10000, followed by 40(20%) were Rs. 10001-20000, followed by 30(15%) were had above Rs. 40001 family income followed by 16(8%) were Rs. 20001-30000 and remaining 14(7%) were had Rs. 30001-40000.

In relation to the type of family majority of the subjects 115(57.5%) were from joint family followed by 81(40.5%) were from nuclear family and 04(2%) were from extended family.

With regard to the area of living majority of the subjects 132(66%) were from rural area and 68(34%) were from urban area.

In relation to number of children majority of the subjects 86(43%) were had one child followed by 78(39%) were had two children followed by 23(11.5%) were had three children and 13(6.50%) were had four children and none of the mother had 5 children.

In relation to previous awareness majority of the subjects 133(66.50%) had previous information and followed by 67(33.50%) had no information.

With regard to the source of information majority of the subjects 66(33%) were had information from media, followed by 44(22%) were had information from staff nurses, 41(20.5%) were had information from friends and relatives, and 34(17%) were had from physician, 15(7.5%) were had information from chemist.

With regard to the age of starting diaper use the majority of the subjects 113(56.5%) were started using at birth, followed by 40(20%) were started using by 3 months, 28(14%) were used by 6 months and 19(9.5%) were used at 1 year.

In relation to the application of diaper the majority of the subjects, 90(45%) were using both during day and night time, followed by 58(29%) were using only night time, 42(21%) were using during out visit only and 10(5%) were using for day time.

**Section (b): assessment of awareness of mothers regarding diaper related problems including management.**

**Table 3:** Describes the range, mean, standard deviation and mean percentage of awareness and practices of mothers related to diaper related problems including management, N=200

No.	Awareness Aspects	Statements	Range	Mean	SD	Mean (%)
1	Awareness	19	3-17	9.07	2.609	47.7%
2	Practice	10	3-10	7.82	1.435	78.2%

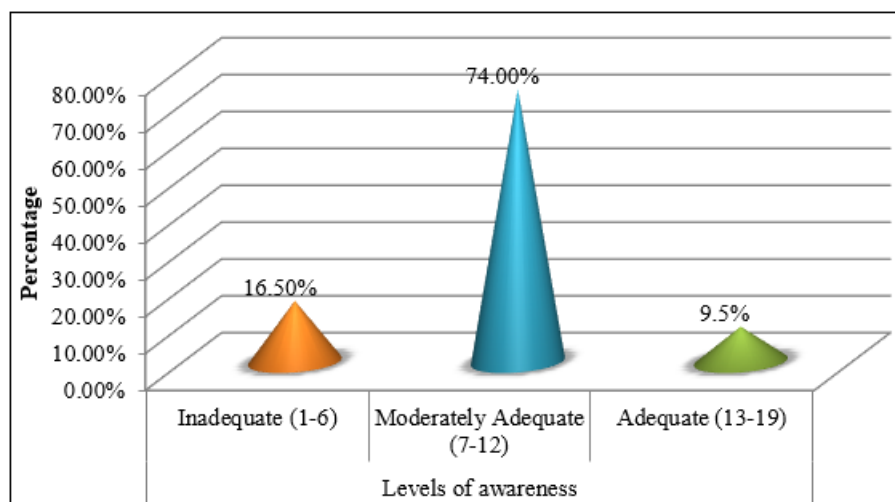
The above table depicts the range, mean, standard deviation and mean percentage of awareness and practice. The mean percentage awareness was 47.7% with mean and SD of 9.07±2.60, the range was 3-7. In the practice, the mean percentage was 78.2% with mean and SD of 7.82±1.43, the range was 3-10.

**Table 4:** Frequency and percentage distribution of samples according to level of awareness, N=200

Sr. No	Awareness Level	Frequency	Percentage
1	Inadequate (1-6)	33	16.5
2	Moderately Adequate (7-12)	148	74.0
3	Adequate (13-19)	19	9.5
	<b>Total</b>	<b>200</b>	<b>100</b>

**Section (c): assessment of mother’s awareness regarding diaper hygiene.**

The above table explain the classification of respondents based on levels of awareness, 148(74%) mothers of diaper wearing children were had moderately adequate awareness, followed by 33(16.5%) were had inadequate awareness, and 19(9.5%) were had adequate awareness.

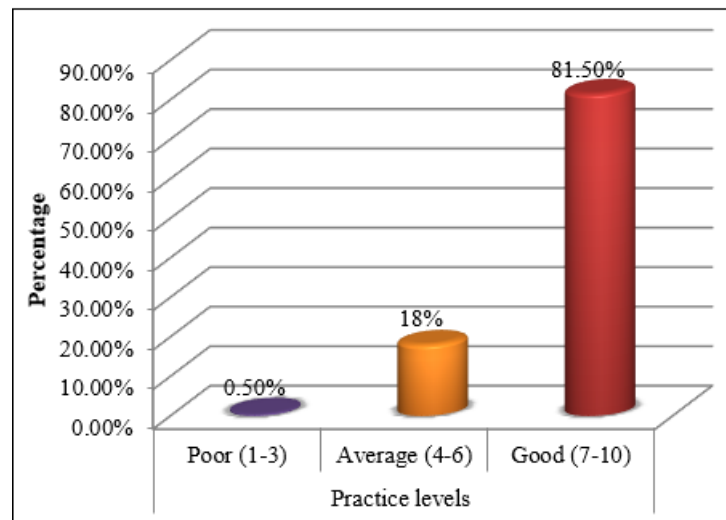


**Figure 3:** Percentage distribution of samples according to awareness levels.

**Table 5:** Frequency and percentage distribution of samples according to levels of practices, N=200

Sr. No	Practice levels	Number	Percentage
1	Poor (1-3)	01	0.5
2	Average (4-6)	36	18
3	Good (7-10)	163	81.5
	<b>Total</b>	<b>200</b>	<b>100</b>

The above table describes the practices levels, 163(81.5%) were had good practices, 36(18%) were had average practices and 01(0.5%) were had poor practices.



**Figure 4:** Percentage distribution of samples according to practice scores.

**Section (d): Correlation between the awareness and practices related to diapher related problems**

**Table 9:** Describes the correlation between the awareness and practices related to diaper care among mothers, N=200

Correlation coefficient	Correlation coefficient	P value
Spearman's rank correlation between awareness and practice	$\rho = 0.288$	$> 0.001$

The correlation coefficient was 0.288 which shows that there was positive moderate correlation between awareness and practice

**Section (e): Association of between the awareness and practices with selected socio demographic variables.**

**Table 6:** Association between the awareness score with selected demographic variables, N=200

SI No	Demographic variable		≤ Median	> Median	Total	Chi-square value	df	P-value	Inference
1	Age in years	18-24 years	34	15	49	8.246	3	0.041	S
		25-30 years	53	41	94				
		31-36 years	24	28	52				
		37-42 years	1	4	5				
2	Educational status	Illiterate	18	11	29	2.753	4	0.600	NS
		Up to primary school	20	16	36				
		Up to secondary	19	17	36				
		Senior secondary	20	10	30				
3	Occupation	House wife	85	67	152	6.586	3	0.086	NS
		Laborer	10	3	13				
		Govt. employee	6	12	18				
		Private employee	11	6	17				
4	Income	≥10000	65	35	100	19.578	4	0.001	S
		10001-20000	25	15	40				
		20001-30000	10	6	16				
		30001-40000	5	9	14				
5	Type of family	Above 40001	7	23	30	.078	2	0.962	Ns
		Nuclear	45	36	81				
		Joint	65	50	115				
6	Area of living	Extended	2	2	4	1.390	1	0.238	Ns
		Rural	70	62	132				

		Urban	42	26	68				
7	No of children	One	48	38	86	0.53	3	0.91	
		Two	42	36	78				
		Three	14	09	23				
		Four and above	08	05	13				

**Table 7:** Association between the awareness score with selected demographic variables, N=200

Sr. No	Demographic variable		≤ Median	Above median	Total	Chi-square value	df	P-value	Inference
1	Previous awareness	Yes	72	61	133	0.56	1	0.45	NS
		No	40	27	67				
2	Source of information	Physician	18	16	34	5.41	4	0.27	NS
		Chemist	8	7	15				
		Friends/Relatives	23	18	41				
		Staff Nurse	31	13	44				
		Media	32	34	66				
3	At the age of started using diaper	At birth	56	57	113	5.83	3	0.12	NS
		3 months	23	17	40				
		6 months	20	08	28				
		1 year	13	06	19				
4	Application of diaper to your child	During day time	08	02	10	6.96	3	0.073	NS
		During Night time	38	20	58				
		Both during day and night time	43	47	90				
		During out visit only	23	19	42				

**Table No. 6 and 7 describe the association between the levels of awareness with selected demographic variables.**

- **Age in years:** The chi square value was 8.246 df=3, shows that there was significant association between the levels of awareness with age in years of mothers.
- **Educational status:** For the educational status the chi square value was 2.75, df=4, found to less than the table value hence the educational status was not found significant with levels of awareness.
- **Occupation:** The calculated chi square value was 6.58, df = 3, Shows that there was no association between the levels of awareness with occupation of mother.
- **Income:** The chi square value 19.57, df=4 Shows that there was an association between the levels of awareness with income of family.
- **Type of family:** The chi square value was 0.78, df=2, did not show any significant association between the levels of awareness.
- **Area of living:** The chi square value was 1.39, df=1 shown that there was no significant association between the levels of awareness.

- **Number of children:** The chi square value was 0.53, df=3, indicates that there was no significant association.
- **Previous information:** the calculated value was 0.56, df=1, which show that there was no significant association between the levels of awareness with previous information.
- **Source of information:** The chi square value was 5.41, df=4, which was lesser than the table value hence there was no significant association between the levels of awareness with source of information.
- **At the age of started using diaper:** The chi value was 5.83, df=3. Indicates that there was no significant association between the awareness and at the age of started using diaper.
- **Application of diaper to your child:** the calculated chi square value was 6.69, df=3, which shows that there was no significant association between the levels of awareness with application of diaper to your child.

**Section (f): Association between levels of practice with their selected demographic variables**

**Table 8:** Association between the levels of practices with selected demographic variables, N=200

S. No	Demographic variable		≤ Median	Above median	Total	Chi-square value	df	P-value	Inference
1	Age in years	18-24 years	38	11	49	3.679	3	0.298	Ns
		25-30 years	59	35	94				
		31-36 years	34	18	52				
		37-42 years	4	1	5				
2	Educational status	Illiterate	21	8	29	10.536	4	0.032	S
		Up to primary school	26	10	36				
		Up to secondary	26	10	36				
		Senior secondary	25	5	30				
3	Occupation	Graduation and above	37	32	69	.683	3	0.877	Ns
		House wife	101	51	152				
		Laborer	10	3	13				
		Govt. employee	12	6	18				
4	Income	Private employee	12	5	17	6.028	4	0.197	Ns
		≥10000	66	34	100				
		10001-20000	31	9	40				

		20001-30000	13	3	16				
		30001-40000	7	7	14				
		Above 40001	18	12	30				
5	Type of family	Nuclear	62	19	81	7.894	2	0.019	S
		Joint	69	46	115				
		Extended	4	0	4				
6	Area of living	Rural	93	39	132	1.545	1	0.214	NS
		Urban	42	26	68				
7	No of children	One	58	28	86	2.36	3	0.50	NS
		Two	52	26	78				
		Three	18	05	23				
		Four and above	07	06	13				

**Table 9:** Association between the levels of practices with selected demographic variables, N=200

S. No	Demographic variable	Below median	Above median	Total	Ch-square value	df	P-value	Inference	
1	Previous awareness	Yes	96	37	133	3.52	1	0.61	NS
		No	39	28	67				
2	Source of information	Physician	24	10	34	1.91	4	0.75	NS
		Chemist	10	05	15				
		Friends/Relatives	29	12	41				
		Staff Nurse	31	13	44				
3	At the age of started using diaper	Media	41	25	66	1.89	3	0.29	NS
		At birth	78	35	113				
		3 months	26	14	40				
		6 months	17	11	28				
4	Application of diaper to your child	1 year	14	05	19	4.61	3	0.20	NS
		During day time	6	4	10				
		During Night time	34	24	58				
		Both during day and night time	66	24	90				
		During out visit only	29	13	42				

**Table No. 8 and 9 describe the association between the levels of awareness with selected demographic variables.**

- **Age in years:** The chi square value was 3.67, df =3, shows that there was no significant association between the levels of practices with age in years of mothers.
- **Educational status:** For the educational status the chi square value was 10.536, df =4, found to greater than the table value hence the educational status was found **significant with levels of practices.**
- **Occupation:** The calculated chi square value was 0.68. df =3. Shows that there was no association between the levels of practices with occupation of mother.
- **Income:** The chi square value 6.02 df =4. Show that there was no association between the levels of practices with income of family.
- **Type of family:** The chi square value was 7.89, df =2, show **significant association between the levels of practices and type of family.**
- **Area of living:** The chi square value was 1.54, df =1 shown that there was no significant association between the levels of practices.
- **Number of children:** The chi square value was 2.36. df =3, indicates that there was no significant association.
- **Previous information:** the calculated value was 3.52. df =1, which show that there was no significant association between the levels of practices with previous information.
- **Source of information:** The chi square value was 1.91, df =4, which was lesser than the table value hence there was no significant association between the levels of practices with source of information.
- **At the age of started using diaper:** The chi value was 1.89, df =3. Indicates that there was no significant

association between the practices and at the age of started using diaper.

- **Application of diaper to your child:** the calculated chi square value was 4.61, df=3, which shows that there was no significant association between the levels of practices with application of diaper to your child.

## 5. Discussion

In this section researcher describes the scattered area of study and major findings of the results along with supportive similar studies undertaken by the various researchers in different settings. The findings are discussed under objectives and review of literature. The present study was conducted to assess the awareness of mothers regarding diaper related problems including management and diaper hygiene practices among mothers of diaper wearing children (0 to 2 years) in selected areas of Faridkot, Punjab, India. In order to achieve the objectives of the study a quantitative research approach and descriptive survey design was used. The 200 mothers of diaper wearing children (0 to 2 years) were selected by convenience sampling technique. The structured knowledge and practice e questionnaires were used to collect the data. The data was analyzed by using descriptive and inferential statistics.

### Major findings related to demographic variables.

- The majority of mothers of diaper wearing children 94(47%) were in the age group of 25-30 years.
- The majority of mothers of diaper wearing children educational status 69(34.5%) was graduation and above.
- In relation to the occupation, majority of the mothers of diaper wearing children 152(76%) were house wives.



- The majority 100(50%) mothers of diaper wearing children family income was less than and equal to Rs. 10000.
- The majority mothers of diaper wearing children 115(57.5%) were from joint family.
- The majority mothers of diaper wearing children 132(66%) were from rural area.
- The majority of mothers of diaper wearing children 86(43%) were had one child.
- In relation to previous awareness majority mothers of diaper wearing children 133(66.50%) had previous information.
- The majority of mothers of diaper wearing children 66(33%) were had information from friends and relatives.
- The majority of mothers of diaper wearing children 113(56.5%) were started using diaper at birth.
- The majority of mothers of diaper wearing children 90(45%) were using diaper during day and night time.

#### First objective was to assess the awareness of mothers regarding diaper related problems and including management.

The mean percentage awareness was 47.7% with mean and SD of  $9.07 \pm 2.60$ , the range was 3-7. The samples were categorized into three levels based on the levels of awareness, among the 200 samples, 148(74%) mothers of diaper wearing children were had moderately adequate awareness whereas 33(16.5%) were had inadequate awareness and 19(9.5%) were had adequate awareness.

#### Second objective was to assess awareness of mother's practices regarding diaper hygiene.

In the practice, the mean percentage was 78.2% with mean and SD of  $7.82 \pm 1.43$ , the range was 3-10.

The samples were classified based on the practices levels, out of 200 samples, 163(81.5%) were had good practices, 36(18%) were had average practices and 01(0.5%) were had poor practices.

The correlation coefficient was 0.288 which shows that there was positive moderate correlation between awareness and practice.

#### Third objective was to determine the association of awareness of mothers regarding diaper hygiene practices with selected socio demographic variables.

The chi-square test was used to find out the association between the awareness score with selected demographic variables. The obtained chi square value for age was (8.246,  $df=3$ ,  $p=0.041$ ), for income 19.578,  $df=4$ ,  $p=0.001$ ) were found significant association and other demographic variables calculated value was less than the table value hence the other demographic variables did not found significant.

The chi-square test was used to find out the association between the practices score with selected demographic variables. The obtained chi square value for educational status was (10.536,  $df=4$ ,  $p=0.032$ ), Type of family (7.894,

$df=2$ ,  $p=0.019$ ) were found significant association and other demographic variables calculated value was less than the table value hence the other demographic variables did not found significant.

## 6. Conclusion

The mean percentage awareness was 47.7% with mean and SD of  $9.07 \pm 2.60$ , the range was 3-7. The samples were categorized into three levels based on the levels of awareness, among the 200 samples, 148(74%) mothers of diaper wearing children were had moderately adequate awareness, followed by 33(16.5%) were had inadequate awareness and 19(9.5%) were had adequate awareness. In the practice, the mean percentage was 78.2% with mean and SD of  $7.82 \pm 1.43$ , the range was 3-10. The samples were classified based on the practices levels, out of 200 samples, 163(81.5%) mothers of diaper wearing children were had good practices, followed by 36(18%) were had average practices and 01(0.5%) were had poor practices. The correlation coefficient was 0.288 which shows that there was positive moderate correlation between awareness and practice. There was an association between the age (8.246,  $df=3$ ,  $p=0.041$ ) and income (19.578,  $df=4$ ,  $p=0.001$ ) of mothers with levels of awareness of mothers. There was association between the educational status (10.536,  $df=4$ ,  $p=0.032$ ) and type of family (7.894,  $df=2$ ,  $p=0.019$ ) with practices cores of mothers.

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