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A Descriptive Study to Assess the Knowledge and Attitude Regarding Diaper Use Among Postnatal Mothers at Selected Hospital, Virudhunagar

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ABSTRACT

Background: The postnatal period is an important time for mothers to learn and practice essential newborn-care skills. Mothers and families require appropriate information, counselling and support to provide safe care for the newborn after birth. The World Health Organization recommends quality postnatal care that addresses the needs of both mothers and newborns. [1] Newborn skin differs from adult skin because its protective barrier is still developing. It is more delicate and sensitive to moisture, friction and other external factors. [2], [3] The diaper area requires special attention because it is frequently exposed to urine, faeces and moisture. Prolonged exposure to moisture and repeated friction may contribute to skin irritation and erythema. [3], [4]

Proper diaper care is therefore an important component of newborn hygiene. Regular diaper changing, gentle cleaning and appropriate care of the diaper area can help maintain skin health and reduce the risk of irritation. [3], [4] Mothers need adequate knowledge of these practices to ensure that diapers are used safely and appropriately.

Objectives: The purpose of the study was to assess the knowledge and attitude regarding diaper use among postnatal mothers at a selected hospital in Virudhunagar.

Methodology: A sample of 60 postnatal mothers were selected using a non-probability purposive sampling technique. Data were collected using a structured interview schedule and a five-point Likert scale. The collected data were organized, tabulated and analysed using descriptive and inferential statistical techniques.

Results: Among the 60 postnatal mothers, 6 (10%) had inadequate knowledge, 22 (37%) had moderately adequate knowledge and 32 (53%) had adequate knowledge regarding diaper use. Regarding attitude, none of the mothers (0%) had an unfavourable attitude, 40 (67%) had a neutral attitude and 20 (33%) had a favourable attitude toward diaper use. Overall, the findings indicated that a majority of the postnatal mothers had adequate knowledge, while most had a neutral attitude toward diaper use.

Conclusion: The study findings indicate that although the majority of postnatal mothers had adequate knowledge regarding diaper use, a considerable proportion demonstrated a neutral attitude. Therefore, appropriate health education and counselling may be beneficial in promoting positive attitudes and appropriate diaper-use practices among postnatal mothers.

Key words: Knowledge, attitude, diaper use and postnatal mothers

INTRODUCTION

Diapers are widely used in infant care to manage urine and faeces and to maintain cleanliness. However, unsuitable diaper practices can result in prolonged contact with moisture and irritants, which may lead to discomfort and skin problems in the diaper area. [3], [4] Therefore, mothers need to understand appropriate practices related to diaper changing, cleansing and protection of the baby's skin. The postnatal period offers an important opportunity for healthcare professionals to provide mothers with guidance on essential newborn-care practices. [1] Evidence-based recommendations for neonatal skin care also highlight the need to provide mothers with appropriate information on maintaining newborn skin health during hospitalisation and before discharge. [3]

A mother's knowledge and attitude can influence how effectively she adopts recommended newborn-care practices. Adequate understanding of diaper use and awareness of possible complications may encourage mothers to follow appropriate diaper-care measures. Hence, evaluating both knowledge and attitude can help identify specific areas that require attention during postnatal health education.

Need for the Study: The early weeks following childbirth provide an important opportunity to establish appropriate newborn-care practices. Mothers may differ in their understanding and previous experience of diaper use and skin care. Providing suitable guidance during this period may help mothers develop safe and hygienic practices for their newborns. [1]

Newborn skin has a developing protective barrier and is more vulnerable to external factors such as moisture and friction. [2], [3] Inappropriate diaper care may therefore contribute to irritation and other skin problems in the diaper area. Evidence-based recommendations for healthy newborns include appropriate cleansing and protection of the diaper area as part of routine skin care. [3] In addition, research has demonstrated that different diaper-care practices can affect newborn skin characteristics, including skin pH and erythema. [4]

A study conducted among mothers of infants in Tamil Nadu found that 90% had inadequate knowledge and 67.4% had an unfavourable attitude regarding the ill effects of diaper use. The study also reported a significant positive relationship between knowledge and attitude ($r = 0.73$, $p < 0.001$). [5] These findings suggest that mothers may benefit from improved education regarding safe diaper use and measures to prevent diaper-related skin problems. Mothers' knowledge and attitudes may also be influenced by factors such as educational status, previous experience and access to health information.

Therefore, assessing the knowledge and attitude of postnatal mothers regarding diaper use is important to determine their existing educational needs. The findings may assist nurses and other healthcare professionals in planning relevant and focused newborn-care education. Hence, the investigator proposes to conduct a descriptive study to assess the knowledge and attitude regarding diaper use among postnatal mothers at a selected hospital in Virudhunagar.

Problem statement:

"A descriptive study to assess the knowledge and attitude regarding diaper use among postnatal mothers at selected hospital, Virudhunagar."

Aim:

- To assess the knowledge regarding diaper use among postnatal mothers.
- To assess the attitude regarding diaper use among postnatal mothers.
- To find out the correlation between the knowledge and attitude regarding diaper use among postnatal mothers.
- To find out the association between the knowledge and attitude regarding diaper use with selected demographic variables of postnatal mothers.

METHODOLOGY

Quantitative research strategy was selected for this study; a non-experimental descriptive research design was adopted. The study was conducted in Government Medical College Hospital at Virudhunagar. It's about five kilometres from V.V. Vanniaperumal Nursing College for Women, Virudhunagar. People from postnatal ward were selected as samples for this study. Non probability purposive sampling technique was used to choose 60 postnatal mothers as the sample. The tool is divided in to three sections: Section I includes Socio demographic variables; Section II is a structured interview schedule designed to assess knowledge and Section III is a five-point Likert scale used to assess attitude of the postnatal mothers regarding diaper use.

RESULTS

The findings were organized in the following section.

Section 1: Classification of subjects based on the socio demographic variables

Section 2: Distribution of subjects based on the knowledge level.

Section 3: Distribution of subjects based on the attitude level.

Section 4: Correlation between knowledge and attitude of subjects regarding diaper use among postnatal mothers

Section 5: Association of subject's knowledge and attitude with selected socio demographic variables

Section: I

Table – I: Classification of subjects based on the socio demographic variables: (n= 60)

S. No	Socio Demographic Variables	Frequency Distribution	Percentage (%)
1.	**Age of the mother**		
	o < 20 years	07	12%
	o 21 -25 years	35	58%
	o 26-30 years	16	27%
	o >30 years	02	3%
2.	**Sex of the child**		
	o Male	33	55%
	o Female	27	45%
3.	**Religion**		
	o Hindu	53	88%
	o Christian	04	07%
	o Muslim	03	05%
	o Others	-	-
4.	**Educational status of the mother**		
	o No formal education	-	-
	o Primary	15	25%
	o Secondary	15	25%
	o Higher secondary	07	12%
	o Graduate & above	23	38%
5.	**Occupation of the mother**		
	o Government Employee	-	-
	o Private employee	03	05%
	o Self employed	06	10%
	o Home maker	05	08%
	o Coolie	46	77%
6.	**Occupation of husband**		
	o Government Employed	01	02%
	o Private employed	11	18%
	o Self employed	12	20%
	o Coolie	36	60%
7.	**Income of the family/month**		
	o < 10000/ month	28	47%
	o 10000 - 20000/month	23	38%
	o >20000/month	09	15%

8.	**Type of family**		
	o Nuclear family	21	35%
	o Joint family	38	63%
	o Extended family	01	02%
9.	**Area of residence**		
	o **Rural**	29	48%
	o **Urban**	31	52%
	o **Slum**	-	-
10.	**Number of children in the family**		
	o >3	01	02%
	o 3	08	13%
	o 2	21	35%
	o 1	30	50%
11.	**Mode of delivery**		
	o Normal vaginal delivery	29	48%
	o Caesarean section	31	52%
	o Forceps and vacuum delivery	-	-
12.	**Birth order of the baby**		
	o 1st child	30	50%
	o 2nd child	22	36%
	o 3rd child	07	12%
	o 4th child	01	2%
13.	**Parity**		
	o Primi mother	30	50%
	o Multipara mother	30	50%
	PATTERN OF DIAPER USE		
14.	**Type of diaper**		
	o Cloth diaper	13	22%
	o Disposable	38	63%
	o Both	09	15%
15.	**Price of diaper single piece**		
	o Rs 10-20	23	38%
	o Rs 20-30	30	50%
	o Rs 40-50	07	12%
16.	**Number of diaper used by the child per day**		
	o 3-4	41	68%
	o 5-6	16	27%
	o 7-8	03	05%
17.	**Frequency of diaper change**		
	o Every 2-3 hours	36	60%
	o Every 4-6 hours	13	22%
	o Only when fully wet / soiled	11	18%
	o Irregularly	-	-
18.	**Which kind of diaper do you commonly used for your baby in the day time?**		
	o Cloth diaper	17	28%
	o Disposable diaper	36	60%
	o Both cloth and disposable diaper	07	12%
	o Do not use diaper during day time	-	-
19.	**Which diaper is mostly used for your baby during night time?**		
	o Cloth diaper		
	o Disposable diaper	15	25%
	o Both cloth and disposable diaper	36	60%
	o Do not use diaper during night time	07	12%
20.	**Which diaper do you choose for your baby while travelling or going out side?**	02	3%
	o Cloth diaper	11	18%
	o Disposable diaper	46	77%
	o Both cloth and disposable diaper	03	05%
	o Do not use diaper during travelling time	-	-

Table 1 shows that the majority, 35 (58%), of the postnatal mothers belongs to the age group of 21–25 years. Among the postnatal mothers, 33 (55%) had a male child, 53 (88%) belongs to the Hindu religion and 24 (38%) had completed graduate-level of education or above. Regarding occupation, 46 (77%) were coolie workers, while 36 (60%) of their husbands were coolie workers. Nearly half, 28 (47%), of the postnatal mothers reported the monthly family income is less than Rs. 10,000. The majority, 38 (63%), belongs to joint families, while 31 (52%) resided in urban areas. Half, 30 (50%), had a single child and 31 (52%) had undergone a caesarean section. Regarding parity, 30 (50%) had delivered their first child, while 30 (50%) were multiparous.

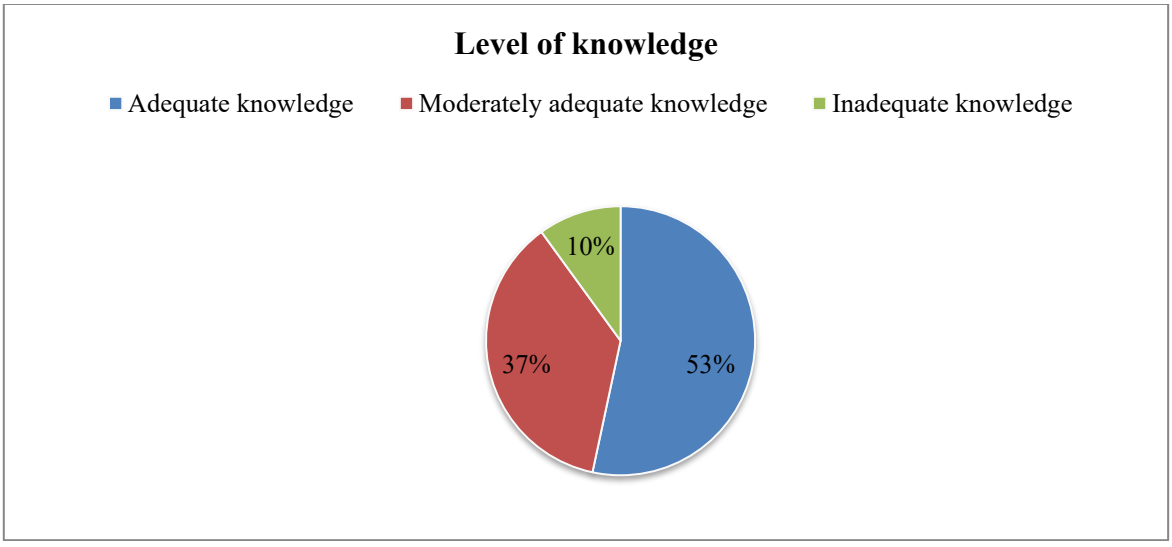
Regarding diaper use, the majority, 38 (63%), of the postnatal mothers used disposable diapers for their babies. Half, 30 (50%), used diapers costing Rs. 20–30. A total of 41 (68%) mothers used 3–4 diapers per day, while 36 (60%) changed their babies' diapers every 2–3 hours. During the daytime, 37 (62%) mothers used disposable diapers, while 36 (60%) used them at night. The majority, 46 (77%), used disposable diapers while travelling.

SECTION - II

Table -II Distribution of subjects based on level of knowledge: (n=60)

S. No	Level of Knowledge	Frequency Distribution	Percentage%
a)	Adequate knowledge	32	53%
b)	Moderately Adequate knowledge	22	37%
c)	Inadequate knowledge	06	10%

Table II shows that 32 (53%) postnatal mothers had adequate knowledge, 22(37%) postnatal mothers had moderately adequate knowledge and 06 (10 %) postnatal mothers had inadequate knowledge regarding diaper use.

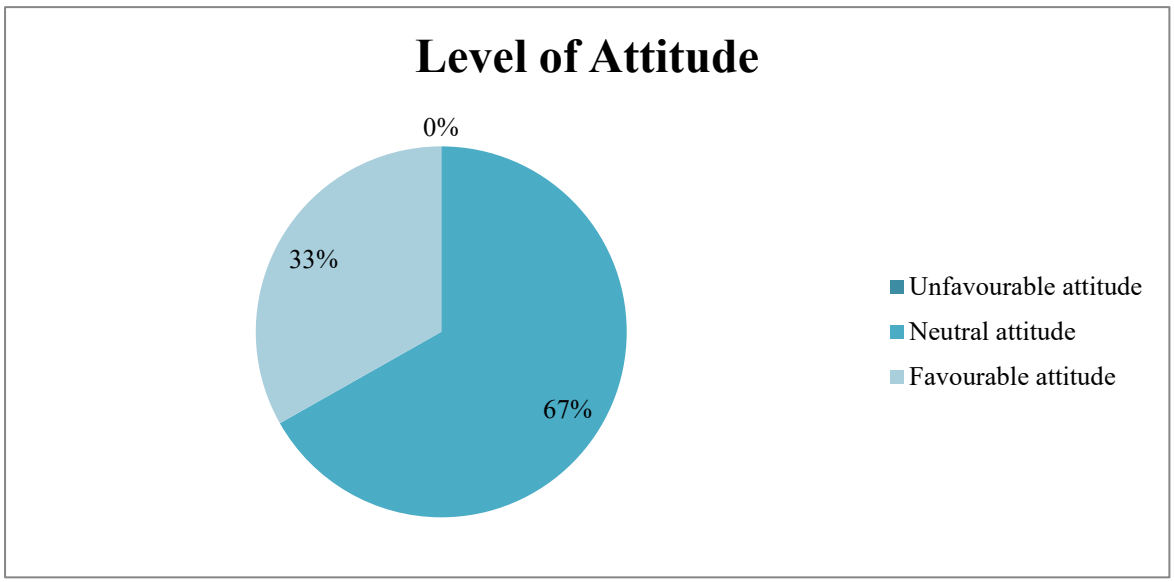


SECTION-III

Table III: Distribution of subjects based on level of attitude: (n=60)

S. No	Level Of Attitude	Frequency Distribution	Percentage (%)
a)	Unfavourable attitude	00	00%
b)	Neutral attitude	40	67%
c)	Favourable attitude	20	33%

Table III shows that 0 (0%) postnatal mothers had unfavourable attitude, 40 (67%) postnatal mothers had neutral attitude and 20 (33%) had favourable attitude regarding diaper use.



SECTION – IV:

Table: IV Correlation between knowledge and attitude of sample regarding the diaper use.

Variables	Mean	Standard Deviation	'r' Value
Knowledge	14.5	10.13	0.9*
Attitude	31.81	18.76	

*Significant at 0.05 level

To correlate the mean knowledge score and mean attitude score of samples regarding the diaper use, the null hypothesis was stated as follows;

There was no significant relationship between knowledge and attitude of sample regarding the diaper use.

Table 4 shows that the obtained knowledge mean score was 14.5 with the standard deviation of 10.13. The obtained attitude mean score was 31.81 with the standard deviation of 18.76. The obtained 'r' value 0.9 which was strong positive and significant at 0.05 level. It was referred that there was a significant relationship between knowledge and attitude of sample regarding the diaper use.

Hence the above findings support the research hypothesis. So, the null hypothesis was rejected.

Section 5: Association between subjects' knowledge and attitude with selected Socio demographic variables.

Knowledge of postnatal mother was significantly associated with certain socio demographic variables such as income of the family per month. Attitude toward postnatal mothers was significantly associated with socio demographic variables such as area of residence and number of children in the family.

Declaration by Authors

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Conflict of Interest: No conflicts of interest declared.

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REFERENCE

1. World Health Organization. WHO recommendations on maternal and newborn care for a positive postnatal experience. Geneva: World Health Organization; 2022.
2. Choi EH. Skin barrier function in neonates and infants. Allergy Asthma Immunol Res. 2025;17(1):32-46. doi:10.4168/aair.2025.17.1.32.
3. Gupta P, Nagesh K, Garg P, Thomas J, Suryawanshi P, Sethuraman G, et al. Evidence-based consensus recommendations for skin care in healthy, full-term neonates in India. Pediatr Health Med Ther. 2023; 14:249-265. doi:10.2147/PHMT.S414091.
4. Gustin J, Bohman L, Ogle J, Fadayel G, Mitchell MC, Narendran V, et al. Improving newborn skin health: Effects of diaper care regimens on skin pH and erythema. Pediatr Dermatol. 2021;38(4):768-774. doi:10.1111/pde.14602.
5. Perdita AHM, Jemmima S. Knowledge and attitude regarding ill effects of diaper use among mothers of infants. TNNMC J Pediatr Nurs. 2023;11(1):13-19.

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