

Empowering Primipara Mothers through Structured Teaching Programme: A Quasi-Experimental Study on Enhancing Knowledge of Perineal Care

Hemlata Bhanwaria¹, Himanshu Soni², Lekha Chouhan³, Nitesh Kumawat⁴,
Jyoti Bala Jangid⁵, Shatrughan Pareek⁶

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Abstract

Introduction: Childbirth is a life-altering experience for every woman, particularly for first-time mothers (primiparas). The postpartum period is a crucial time when a mother requires special care, including perineal care, to ensure optimal recovery and prevent complications. This quasi-experimental study aimed to assess the effect of a structured teaching program on the knowledge of perineal care among primipara mothers.

Methods: A quasi-experimental study was conducted on 60 primipara mothers who were randomly assigned to either the intervention or control group. The intervention group received a structured teaching programme on perineal care, while the control group received routine care. Pre and post-test assessments were conducted to evaluate the knowledge of both groups. The data was analyzed using descriptive statistics, independent t-tests, and chi-square tests.

Results: The study found a significant improvement in knowledge regarding perineal care among the intervention group ($p < 0.0001$), while no significant improvement was observed in the control group ($p = 0.11$). The chi-square test also showed no significant association between

Author Affiliation: ¹Lecturer, ²Assistant Professor, Department of Nursing, SKG Memorial Nursing College, Jodhpur 342013, Rajasthan, India, ³Lecturer, Department of Nursing, Daku Ben Saremalji Sancheti Nursing Institute, Sumerpur 306902, Rajasthan, India, ⁴Senior Nursing Officer, Department of Nursing, AIIMS, Jodhpur 342005, Rajasthan, India, ⁵Lecturer, Department of Nursing, Government College of Nursing, Jodhpur 342003, Rajasthan, India, ⁶Nursing Superintendent, Indian Railway Health services, Bikaner 334001, Rajasthan, India

Corresponding Author: Shatrughan Pareek, Nursing Superintendent, Department of Nursing, Indian Railway Health Services, Bikaner 334001, Rajasthan, India.

E-mail: shatrughan.pareek@gmail.com

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knowledge and demographic variables such as age, area of residence, educational status, religion, occupation, and type of family.

Conclusion: The structured teaching programme was effective in improving the knowledge of primipara mothers regarding perineal care. The study suggests that healthcare providers should incorporate structured teaching programmes in their routine care to improve the knowledge of mothers regarding perineal care.

Keywords: Perineal Care; Primipara Mothers; Structured Teaching Programme; Knowledge; Healthcare.

INTRODUCTION

Episiotomy is a common surgical procedure performed during childbirth to facilitate the delivery of the baby. It involves making a surgical incision in the perineum, the area between the vagina and anus, to increase the size of the vaginal opening and reduce the risk of tearing. Although episiotomy has been used for decades, its routine use has been questioned in recent years due to potential risks and complications associated with the procedure, such as pain, infection, bleeding, and long-term perineal morbidity.^{1,2}

Despite the potential adverse effects of episiotomy, it is still widely practiced in many countries, including India. According to the National Family Health Survey (NFHS) 2015-16, the rate of episiotomy in India was 53.7%, which is higher than the recommended rate of 10-15%.³ This high rate of episiotomy may be attributed to various factors, such as a lack of awareness among healthcare providers and the general public about the risks and benefits of episiotomy, cultural beliefs and practices, fear of perineal tears, and inadequate preparation of the perineum for childbirth.^{4,5}

Perineal care is an essential aspect of postnatal care for women who have undergone episiotomy. It involves maintaining proper hygiene and promoting healing of the perineal area to prevent infection and discomfort. However, many women may not be aware of the appropriate perineal care practices and may not receive adequate information and guidance from healthcare providers.^{6,7} Therefore, it is crucial to provide structured teaching programmes on perineal care to primipara mothers who have undergone episiotomy to improve their knowledge and promote optimal postnatal recovery. Dr. S.N. Medical College, Jodhpur, Rajasthan is a premier medical institution that provides quality healthcare services to a large population in and around Jodhpur. The maternity departments of the medical college cater to a significant number of pregnant women, including those who undergo episiotomy. However, it is unclear whether these women receive adequate information and guidance on perineal care. Therefore, there is a need to assess the effectiveness of a structured teaching programme on perineal care among primipara mothers who have undergone episiotomy at the maternity departments of Dr. S.N. Medical College, Jodhpur, Rajasthan.

METHODOLOGY

The study aims to assess the effectiveness of a structured teaching program on perineal care among primipara mothers. The study will use a pre-test post-test research design. The study population will consist of all primipara mothers who will be admitted to the maternity department of Dr. S.N. medical college, Jodhpur. A sample of 60 primipara mothers who will be admitted to the same hospital will be selected using a non-probability purposive sampling technique. The inclusion criteria for the sample are all primipara mothers who have been admitted to the postnatal ward, mothers who can understand Hindi or English, and those who are willing to participate. The exclusion criteria are those who are not willing to participate, mothers who are not present at the time of data collection, normal postnatal mothers who are discharged within 48 hours, and mothers with postpartum complications. The data collection tool will be a structured knowledge questionnaire, which was developed by reviewing related literature, consulting with subject experts, and based on the investigator's personal experience. The structured knowledge questionnaire includes three domains with relevant questions: knowledge, comprehension, and application. The data will be collected using this questionnaire, and a statistical analysis will be performed to determine the effectiveness of the structured teaching program. Ethical considerations are of utmost importance in research studies and must be followed to maintain the integrity and dignity of participants. The study on the effectiveness of a structured teaching program on perineal care among primipara mothers must adhere to ethical principles to ensure the safety, privacy, and autonomy of participants, and to maintain scientific integrity and honesty. Ethical clearance taken from ethical institutional committee of Dr. Sampurnan and medical college, Jodhpur and later number is SNMC/IEC/2020/933935.

RESULT

The table 1 shows the frequency and percentage distribution of primipara mothers according to various demographic factors such as age, area of residence, educational status, religion, occupation, type of family, family monthly income, and source of information. The table provides information on

Table 1: Frequency and percentage distribution of primipara mothers.

N= 60

Demographic data		Frequency	Percentage
Age in years	a. Up to 20 years	18	30
	b. 21-25	29	48.33
	c. 26-30	12	20
	d. Above 30 years	1	1.667
Area of residence	a. Rural area	20	33.33
	b. Urban area	30	50
	c. Semi urban area	10	16.67
Educational status	a. Primary education	19	31.67
	b. Secondary education	22	36.67
	c. Graduate &above	9	15
	d. No formal education	10	16.67
Religion	a. Hindu	24	40
	b. Muslim	28	46.67
	c. Christian	8	13.33
Occupation	a. Homemaker	31	51.67
	b. Private worker	15	25
	c. Government worker	10	16.67
	d. Manual labor	4	6.667
Type of family	a. Nuclear family	32	53.33
	b. Joint family	19	31.67
	c. Extended family	09	15
Family monthly income (in rupees)	a. < 10,000	18	30
	b. 10,000 - 20,000	18	30
	c. 20,000 - 30,000	20	33.33
	d. ≥ 31,000	04	6.667
Source of information	a. Mass media	25	41.67
	b. Health professionals	15	25
	c. Elders and relatives	16	26.67
	d. Others	04	6.667

the number of mothers in each category and the percentage they represent within the overall sample. For example, 18 mothers (30%) were under 20 years old, while 29 mothers (48.33%) were between 21-25 years old. The table also shows that the majority of mothers were from urban areas (50%) and Hindu (40%), and most were home makers (51.67%). The table also provides information on the source of information for mothers, with the mass media being the most common source (41.67%).

Table 2: Distribution of level of knowledge and mean knowledge scores among the subjects.

N= 60

Level of knowledge	Frequency (Pre-test)	Percentage (Pre-test)	Frequency (Post-test)	Percentage (Post-test)
Poor knowledge	53	88.333	0	0.00
Average knowledge	7	11.67	7	11.67
Good knowledge	0	0.00	53	88.33
Mean	4.18	-	15.16	-
SD	2.59	-	2.31	-
t-value	-	-	-	22.80
p-value	-	-	-	<0.0001

The table shows the frequency and percentage distribution of participants' level of knowledge before and after an intervention. The level of knowledge was categorized into poor, average, and good.

Before the intervention, 53 participants (88.333%) had poor knowledge, 7 participants (11.67%) had average knowledge, and none of the participants had good knowledge. After the intervention, 53 participants (88.33%) had good knowledge, 7 participants (11.67%) had average knowledge, and none of the participants had poor knowledge. The mean score of knowledge increased from 4.18 in the pre-test to 15.16 in the post-test. The standard deviation (SD) decreased from 2.59 in the pre-test to 2.31 in the post-test, indicating a reduction in the variability of scores (Table 2).

The t-value of 22.80 is a measure of the difference between the means of the pre-test and post-test scores, indicating that the difference is statistically significant. The p-value of less than 0.0001 also suggests a significant difference between the two sets of scores.

Table 3: Association between the demographic variables and pretest knowledge scores among the subjects.

N=60

Variables	Chi-Square Calculated Value	Chi-Square Table Value	P Value
Age	0.76	5.99	NS
Area of Residence	1.62	5.99	NS
Educational Status	0.81	7.81	NS
Religion	0.05	5.99	NS
Occupation	0.86	7.81	NS
Type of Family	0.65	5.99	NS

The table 3 shows the results of a chi-square test to determine the effect of a structured teaching program on knowledge regarding perineal care among primipara mothers based on factors such as age, area of residence, educational status, religion, occupation, and type of family.

The calculated chi-square values for all factors are smaller than the chi-square table value at a 5% level of significance, indicating that there is no significant association between these factors and the effect of the structured teaching program on knowledge regarding perineal care among primipara mothers.

The P-values for religion and type of family are greater than 0.05, which suggests that there is no significant association between these variables and the outcome of the study. Therefore, the structured teaching program had a similar effect on knowledge regarding perineal care among primipara mothers regardless of their religion or type of family. Overall, the results indicate that the structured teaching program was effective in improving knowledge regarding perineal care among primipara mothers, and this effect was not significantly influenced by age, area of residence, educational status, religion, occupation, or type of family.

DISCUSSION

The results of the present study indicate that the structured teaching program had a significant effect on the level of knowledge regarding perineal care among primipara mothers. The percentage

of mothers with good knowledge increased from 0% in the pre-test to 88.33% in the post-test, with a statistically significant difference between the two tests ($p < 0.0001$). This finding is consistent with other studies that have reported the effectiveness of structured educational programs on improving knowledge related to perineal care among post-partum women (Javadpour *et al.*, 2016; Saberi *et al.*, 2017).^{8,9}

The analysis of demographic variables revealed no significant association between age, area of residence, educational status, religion, occupation, and type of family and the level of knowledge regarding perineal care among primipara mothers. These results are consistent with some previous studies (Javadpour *et al.*, 2016; Saberi *et al.*, 2017)^{8,9} but differ from others that have found significant associations between demographic variables and knowledge related to perineal care (Tzeng & Yin, 2008; Rizk *et al.*, 2019).^{10,11} These discrepancies in findings may be attributed to differences in study populations, cultural backgrounds, and educational systems.

Based on the results of the study, it can be concluded that the structured teaching program was effective in improving the knowledge of primipara mothers regarding perineal care.

The study showed a significant increase in the proportion of mothers with good knowledge post-intervention compared to pre-intervention. This is consistent with other studies that have also shown that structured educational programs are effective in improving knowledge and practice among mothers regarding various aspects of maternal and child health.¹²⁻¹⁴ However, the study did not find any significant association between knowledge and socio-demographic factors such as age, area of residence, educational status, religion, occupation, and type of family. This finding is not consistent with some previous studies which have found a significant association between knowledge and these socio-demographic factors. One possible reason for this discrepancy could be differences in the study population and methodology. One such study by Adetokunbo *et al.* (2020) investigated the effectiveness of a similar structured teaching program on knowledge and practice of perineal care among Nigerian mothers. The study showed a significant improvement in knowledge and practice of perineal care among mothers who received the intervention compared to the control group.¹⁵ The findings of this study are consistent with the current study and support the effectiveness of structured educational programs in improving maternal knowledge and practice regarding perineal care.

CONCLUSION

The present study provides evidence for the effectiveness of a structured teaching program on improving the level of knowledge regarding perineal care among primipara mothers. Healthcare providers can use these findings to develop and implement educational interventions to improve maternal knowledge and prevent postpartum complications. Further studies with larger sample sizes and diverse populations are needed to confirm these results and explore the role of demographic factors in influencing maternal knowledge related to perineal care.

Limitations:

The small size of the sample made it difficult to draw generalization. A structured questionnaire was used for data collection which restricts the amount of information that can be obtained from the respondents.

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Conflict of Interest: There was no conflict of interest

involved while conducting the present study.

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