

Effectiveness of structured teaching programme on knowledge of practice regarding perineal care among primi mothers

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ABSTRACT


Background: The postpartum period is the period when women adjust physically and psychologically after the delivery of the baby. It is the period after the end of labor during which special attention of a midwife is required on the women and the baby. Childbirth is a physical and emotional experience. It is also an irrevocable event that changes a woman forever. The more realistic women's expectations about the birth are, the more likely she is to have a positive experience. **Objectives:** The objectives of the study were to evaluate the effectiveness of structured teaching programme (STP) regarding perineal care among primi mothers. **Material and Methods:** A quantitative approach with quasi-experimental, non-equivalent control group, pretest post-test design was conducted in selected hospital of Doiwala, Dehradun, Uttarakhand. 60 primi mothers (30 in the experimental group and 30 in control group) were selected using non-probability convenient sampling technique. Pre-test was taken with the help of structured knowledge questionnaire in experimental and control group, and STP was administered using charts and posters in the experimental group. Post-test was conducted after 7 days of intervention using the same questionnaire. Perineal pain was measured by numerical pain rating scale on the day of delivery, 4th and 8th postpartum day. **Results:** The study shows that the mean post-test knowledge score was 23.73 ± 1.41 in the experimental group and 12.63 ± 2.87 in control group. The "t" calculated value is 19.003 which is more than the tabulated value of 2.00 at 0.05 level of significance. **Conclusion:** The findings of the study revealed that there was a significant difference between the mean post-test scores in both groups; therefore, it was concluded that teaching regarding perineal care was effective in enhancing the knowledge of primi mothers in the experimental group.

KEY WORDS: Knowledge; Primi Mothers; Episiotomy; Perineal Pain; Structured Teaching Programme

INTRODUCTION

Motherhood is a beautiful process during which the mother safely delivers a child. It is the magic of creation and care should be given to ensure safe childbirth and safe motherhood.^[1] Postnatal period is a crucial period in the life

of any woman. They require special care during pregnancy, delivery and after delivery to prove safe motherhood and healthy living. Due to childbirth, the mother becomes tired and weak which leads to physical discomfort, pain due to episiotomy, retention of urine due to bruising of the neck of the urinary bladder, and constipation due to loss of a large amount of fluids. Many of the mothers are uneducated and ignorant about postnatal care. Hence, the focus of nursing is to teach self-post pregnancy care to maintain good postpartum health in primi mothers.^[8] According to the WHO, the number of normal delivery rate being very high 72.30% per thousand birth. Following vaginal delivery, the risks of perineal infections range from 2.8% to higher than

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18%, the risk of infection can be as high as 20%. All the maternal death in Asia is due to high population density, poverty, low female literacy and poor health services.^[9] Personal perception of the investigator while working with postnatal mothers at clinical posting was that self-perineal care was very less during the postpartum period, which leads to infection very easily. Poor self-perineal not only cause infections but other complications also such as perineal pain related to episiotomy and discomfort. Investigator felt that if mothers had adequate knowledge related to self-perineal care, then infection can be prevented. Therefore, education about self-perineal care for prevention of infection should be enhanced during the postpartum period.

MATERIALS AND METHODS

Quantitative approach with quasi-experimental, non-equivalent control group, pretest post-test design was used to assess the effectiveness of structured teaching programme (STP) on knowledge of practice regarding perineal care. Data were collected at Community Health Centre, Doiwala, Dehradun, Uttarakhand, in December 2015. 60 primi mothers who fulfilled the inclusion criteria were selected using non-probability sampling technique and randomly assigned to two experimental (30) and control group (30). Before data collection participants were explained about the procedure and purpose of the study and written informed consent was obtained. Pre-interventional data were collected using structured knowledge questionnaire. In the experimental group, STP regarding perineal care was administered using charts and posters. Post-test was conducted after 7 days of intervention using the same questionnaire. Perineal pain was measured by numerical pain rating scale on the day of delivery, 4th and 8th postpartum day. Descriptive and inferential statistics were used to describe the results of the study.

RESULTS

Table 1 showed the frequency and percentage distribution of sociodemographic characteristics of primi mothers. Data revealed that majority of the primi mothers (53.3%) in experimental group and (46.7%) in control group were within the age group of 19–22 years, followed by those in age group of 23–26 years, and the mean age of the primi mothers in experimental group was 22.26 and 22.76 in control group. All primi mothers in experimental and control group belonged to a rural area. In regard to the religion, the present study showed that majority of the primi mothers (61.3%) in experimental group and (56.7%) in control group were Hindu, 32.3% and 30% primi mothers in experimental and control group were Muslim and 3.3% and 13.3% in experimental and control group were Sikh. In regard to educational level, the present study showed that 26.7% and 16.7% respondents in experimental and control group had primary education. A similar percentage (23.3%) in both groups had secondary

Table 1: Frequency and percentage distribution of sociodemographic characteristics of the primi mothers in experimental and control group, $n=60$

Subject profile	f (%)	
	Control group ($n_1=30$)	Experimental group ($n_2=30$)
Age in years		
19–22	14 (46.7)	16 (53.3)
23–26	16 (53.3)	14 (46.7)
Residential area		
Rural area	30 (100)	30 (100)
Religion		
Hindu	17 (56.7)	19 (61.3)
Muslim	9 (30)	10 (32.3)
Sikh	4 (13.3)	1 (3.3)
Educational status		
Primary	5 (16.7)	8 (26.7)
Secondary	7 (23.3)	7 (23.3)
Senior secondary	12 (40)	9 (30)
Graduation	6 (20)	6 (20)
Occupation		
Homemaker	27 (90)	26 (86.7)
Private worker	3 (10)	4 (13.3)
Type of family		
Nuclear family	10 (33.3)	17 (23.3)
Joint family	14 (46.7)	19 (63.3)
Extended family	6 (20)	4 (13.3)
Exposed to any health information		
Yes	1 (3.3)	2 (6.7)
No	29 (96.7)	28 (93.3)
Any family member healthcare provider		
No	30 (100)	30 (100)

education, 30% and 40% in experimental and control group had senior secondary education, while 20% in both groups had university education. Regarding the occupation, 86.7% of primi mothers in the experimental group and 90% in control group were homemaker whereas 13.3% in the experimental group and 10% in control group were private workers. In regard to the type of family, 63.3% in the experimental group and 46.7% in control group belonged to joint family, 23.3% of primi mothers in both groups belonged to the nuclear family, and 13.3% in the experimental group and 20% in control group were belonged to extended family. Most of the primi mothers (93.3%) in the experimental group and 96.7% in control group were not exposed to any kind of health information related to perineal care, and in their family, there was no healthcare provider found in the families of both groups.

Table 2 showed the percentage distribution of knowledge of primi mothers regarding self-perineal care in both groups. The pretest data showed that 80% primi mothers in both groups were having the average knowledge, and nobody in both groups was having very good knowledge.

Post-test results showed that 76.7% primi mothers in control group were having average knowledge, and 19.3% primi mothers in the experimental group were having very good knowledge.

Table 3 shows the significant difference in mean post-test knowledge score between the groups at $P < 0.0001$ level of significance. It shows the effectiveness of STP on knowledge of practice regarding perineal care.

Table 4 summarizes the comparison of pre- and post-test mean perineal score at 3 different times of interval in experimental and control group. Results revealed that there was a significant difference in the mean with SD in control group (0.001) and experimental group (0.0001) at 3 different times of interval. In experimental group, perineal pain score was significantly reduced from 1st day to 8th day as compare to control group that might be due to intervention is given to the experimental group and in control group, it can be due to natural healing.

DISCUSSION

The present study findings show that mean post-test knowledge scores in the experimental group was higher ($23.73\% \pm 1.41$) as compared to the control group (12.63 ± 2.87) with $t = 19.003$ at 0.05 level of significance. The study finding was supported by a similar study conducted by Seema (2014)^[12] in which the mean knowledge score of the experimental group (30.26 ± 2.79) was higher than the control group (23.56 ± 4.43). The difference between both groups shows that the STP was effective in improving the knowledge.

A similar study conducted by Poonam Gadiya, Sijo Koshy, Ravindra H. N. (2014)^[13] Showed the difference between the mean pre-test knowledge scores (5.77 ± 2.126) and mean post-test knowledge scores (20.95 ± 1.93), which was highly significant at 1% level of significance, this shows that the planned teaching programme on episiotomy care was effective in enhancing the knowledge of primi mothers. Results of Hoda Abed EI – Azim Mohamed and Nahed Saied EI – Nagger (2012)^[2] also showed that the self-perineal care instructions were effective in reducing the perineal pain and improving the wound healing of post-partum women.

In regard to the level of perineal pain scores, the present study showed a statistically significant reduction in the level of perineal pain on the 4th day and 8th postpartum day between the two groups ($Z = 5.756$ at $P = 0.0001$) and ($Z = 6.808$ at $P = 0.0000$), respectively. This could be due to the effect of practicing proper self-perineal care during the postpartum period. These results were compared to same study conducted by Hoda Abed EI – Azim Mohamed and Nahed Saied EI – Nagger (2012)^[2] on effectiveness of self-perineal care instructions on episiotomy pain and wound healing of postpartum women and they found a statistically significant difference in episiotomy pain at 4, 24, and 48 h and 7 days postpartum between the two groups.

In the present study, the statistically significant association was found with educational status of the primi mothers ($P = 0.004$). Thus, it could be inferred that only educational status has influence on mean knowledge scores of practice in both groups, it also indicated that those women who had higher educational status also scored higher score in knowledge questionnaire.

Strength

- The study had the control group.
- Homogeneity of the groups was maintained.

Table 2: Percentage distribution of pre-test and post-test level of knowledge scores of primi mothers regarding self-perineal care among both groups, $n=60$

Level of knowledge	Range of score	Control group ($n_1=30$)		Experimental group ($n_2=30$)	
		Pre-test %	Post-test %	Pre-test %	Post-test %
Average	5–15	80	76.7	80	0
Good	16–25	20	23.3	20	80.7
Very good	> 25	0	0	0	19.3

Table 3: Comparison of pre-test and post-test mean scores of primi mothers in experimental and control group, $n=60$

Time of assessment	Control group ($n_1=30$)				Experimental group ($n_2=30$)			
	X	SD	t	P	X	SD	t	P
Pre-test	12.66	2.89	0.215	0.831	12.53	2.77	21.936	0.0001
Post-test	12.63	2.87			23.73	1.41		

$t^{29}=2.045$, $df=1$ $P<0.05$. SD: Standard deviation

Table 4: Comparison of mean and SD of perineal pain scores of the primi mothers in experimental and control group, $n=60$

Time of assessment	Control group ($n_1=30$)				Experimental group ($n_2=30$)			
	f (%)	Mean±SD	f	P	f (%)	Mean±SD	f	P
On the day of delivery		9.46±0.507	1369.75	0.001		9.5±0.508	2393.69	0.0001
Worst pain	16 (53.3)				17 (56.7)			
Severe pain	14 (46.7)				13 (43.3)			
4 th day		6.63±0.490				5.53±0.507		
Moderate pain	11 (36.7)				30 (100)			
Severe pain	19 (63.3)				00 (00)			
8 th day		3.46±0.628				0.60±0.621		
Moderate pain	00 (53.3)				16 (00)			
Mild pain	16 (46.7)				14 (53.3)			
No pain	14 (00)				00 (46.7)			

$f(2.58) = 3.15, P < 0.05$. SD: Standard deviation

- The researcher has measured the perineal pain at a different interval to assess the effectiveness of STP in term of reduction in perineal pain level.

Limitation

- The study was limited to small sample size.
- The study was limited to one setting only.

CONCLUSION

The self-perineal care is effective in reducing the perineal pain and enhancing the wound healing of primi mothers. Results of the current study supported the investigated hypothesis of the study; it could be concluded that women who received and practiced self-perineal care during the postpartum period had:

- Increase the level of knowledge regarding self-perineal care.
- Decrease level of postpartum episiotomy pain.
- Primi mothers in the experimental group also reported that they were able to carry out their daily activities, such as walking, sitting, urination, and defecation in a comfortable way as compared to control group.

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