



## Research Article

# Effect of Planned Health Teaching on Knowledge of Perineal Care among Postnatal Mothers Admitted in Postnatal Unit of Selected Hospitals Pune City

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## Abstract

**Objectives:** The objectives of the study were to assess the existing knowledge regarding perineal care among postnatal mothers, to assess the post-test knowledge score of perineal care among postnatal mothers, to compare pre-test and post-test knowledge score of perineal care among postnatal mothers, and to correlate post-test knowledge score with selected demographic variables. **Methods:** The data gathering process started on October 11, 2016, and ended on November 6, 2016. The data collection process was done in three-phase; in the first phase, pre-test was done by conducting a semi-structured questionnaire schedule and planned health teaching was administered on the 2<sup>nd</sup> day of the pre-test. In the second phase, post-test was conducted on the 8<sup>th</sup> day using the same knowledge questionnaire schedule and in the third phase, the data collected in phases 1 and 2 were analyzed using descriptive and inferential statistics and interpreted in terms of the objectives and hypothesis of the study. **Results:** The majority 68% of samples belong to the age group 18–23 years, whereas very few mothers, 7% belong to the age group 30–36 years. The majority of 48% are having secondary educational qualifications, whereas 7% of mothers are graduate and postgraduate. The majority 46% of the samples have monthly family income around Rs. 3000, whereas 7% have above Rs. 9000. The majority of 45% of samples are delivered twice, whereas only 2% of mothers delivered more than thrice. Overall pre-test mean is 11.08333 and post-test mean 19, whereas  $t = 14.88317$  and  $P = 0.000000625$  which is  $<0.05$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. **Conclusion:** Concluded that planned health teaching was effective. Pre-test score of 19 samples is poor, 41 samples are in average whereas nobody is in a good category. While in the post-test, 37 are in good category and 23 of the samples belong to the average category, whereas nobody is in the poor category. There is no association found between post-test score and demographics variables.

**Key words:** Demographic variables, health teaching, perineal care, postnatal mothers

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## Introduction

The Millennium Development Goals have focused global attention on significantly improving maternal and infant health.<sup>[1]</sup>

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UN Joint Action Plan 2010 suggests that there are around 350,000–500,000 maternal deaths per year, with 15 million more women suffering long-lasting injury or illness from preventable pregnancy-related causes and complications. All postpartum women have to learn, master health knowledge needs, such as their physiological changes, infant feeding, and care technology.<sup>[2]</sup>

WHO, 2007, states that in the postnatal period, many postpartum complications, as 56.1% suffering from fever, 76 were having abdominal pain and 45.8% perineal pain, for several weeks, especially if there was tissue damage or an episiotomy during the second stage of labor. The woman's perineum should be regularly inspected to make sure it is not infected. Hence, health education should be teaching to the mothers for their self perineal care, knowledge of disease prevention, and specific practices.<sup>[3]</sup>

Proper care of the perineum after childbirth is very important to avoid infection and to speed the healing of the rectal and pelvic muscles. Perineal care is the washing of the genital and rectal areas of the body.<sup>[4]</sup> The postpartum period covers a critical transitional time for a woman, her newborn and her family, on a physiological, emotional, and social level.<sup>[5]</sup>

Poor quality care reduces opportunities for health promotion and for the early detection and adequate management of problems and disease. The postpartum period is a very special phase in the life of a woman and her newborn. For women experiencing childbirth for the first time, it marks probably the most significant and life-changing event they have yet lived. It is marked by strong emotions, dramatic physical changes, new and altered relationships, and the assumption of and adjustment to new roles. It is a time of profound transition, making great demands on the woman's resilience and capacity to adapt. For a young girl, this period marks a sometimes bewildering acceleration of the normal transition to a new identity as a woman and as a mother.<sup>[6]</sup>

A review of past and current perineal care practices and major research studies relative to perineal care can form a foundation from which to evaluate and update the management of perineal care. The postpartum period is a social as well as a personal event and has meaning well beyond the simple physiological events which mark it.<sup>[7]</sup>

Postpartum complications can be grouped into acute life-threatening, mid- and long-term chronic conditions. Increased awareness of warning signals and appropriate intervention is needed at all levels. Skilled self perineal care and early identification of problems could reduce the incidence of death and disability, together with the access to functional referral services. The development of a complete functional chain of referral from the community to the district hospital is one of the major tasks in the prevention of maternal and neonatal deaths.

Postpartum care must be a collaboration between parents, families, caregivers trained or traditional, health professionals, health planners, health-care administrators, other related sectors, community groups, policymakers, and politicians. They all need accurate information about what constitutes the best care in the postpartum period.<sup>[8]</sup> The objective of the study was to assess the existing knowledge regarding perineal care among postnatal mothers, to assess the post-test knowledge score of perineal care among postnatal mothers, to compare pre-test and post-test knowledge score of perineal care among postnatal mothers, and to correlate post-test knowledge score with selected demographic variables.

## Methods

It is a systematic objective, method of discovering with empirical evidence and rigorous control. The research

approach refers to the way in which the researcher plans the research process. This study was based on an evaluative approach. According to Polit *et al.*, 2001, the purpose of the evaluative study is to measure the effect of a program against the set goals, which in turn contributes to subsequent decision making about the program and improving future programming. An evaluative approach was to be more appropriate to assess the knowledge gain.

## Research Design

In the present study, a pre-test was administered by means of structured questionnaire depicted as O<sub>1</sub> and then planned health teaching was given depicted as X, a post-test was conducted using the same structured questionnaire depicted O<sub>2</sub>.

### Variable of the study

According to Polit *et al.*, 2001, variables are qualities, properties, or characteristics of persons, things, or situations that change or vary.<sup>[9]</sup>

### Independent variable

In this study, the independent variable is the planned health teaching on perineal care.

### Dependent variable

In this study, the dependent variable is the knowledge of postnatal mothers regarding perineal care.

### Setting of the study

Setting refers to the area where the study is conducted. The setting for this study was selected Hospitals of Pune city. Prior permission is taken from the dean authority of the respective hospitals.

### Target population

It is composed of an entire group of people or objects to which the researcher wishes to generalize the findings of the study. The target population for the present study was postnatal mothers.

### Accessible population

It is the aggregate of participation that conforms to the designed criteria and is assessable as a pool of subjects for a study. The accessible population for the study was postnatal mothers admitted in the postnatal unit of selected hospitals of Pune city.

### Sampling technique

In this study, the selection of the sample depended on the ready availability and fulfillment of the inclusion criteria until a designated size of sixty mothers was reached. The investigator preferred to choose this sampling technique to testing knowledge and gaining

knowledge and to complete the data collection within the stipulated time.

### Sampling size

In this study, the sample consists of sixty postnatal mothers from selected hospitals of Pune city to fulfill the criteria laid down for the selection of the sample.

### Inclusion criteria

The following criteria were included in the study:

1. Postnatal mothers admitted in the postnatal ward
2. Mothers who are in 1<sup>st</sup> week of the postnatal period
3. Mothers who can read and write Marathi
4. Mothers who are willing to participate.

### Exclusion criteria

The following criteria were excluded from the study:

1. Mothers those who are related to the health-care profession
2. Mothers who have attended a training program in perineal care
3. Mothers who have critical illnesses like eclampsia.

### Tool preparation

A tool is an instrument or equipment used for collecting the data.

### Description of the tool

#### Questionnaire

A structured questionnaire was prepared to determine the knowledge of postnatal mothers regarding perineal care. The questionnaire consists of all closed-ended questions as they are easier to administer and analyze. They can also be completed in a given amount of time.

#### Section I

It consists of items on the demographic background, that is, age, education, monthly family income, and no. of delivery. A total of four items were included in this section.

#### Section II

Comprise of multiple-choice questionnaire knowledge items based on blueprint categorized under the following broad areas.

- Meaning of perineal care
- Purposes of perineal care
- Procedure of perineal care with its rationale
- Complication of ignorance toward perineal care
- Important tips of perineal care.

### Scoring

A score of "1" was given for each correct answer and score "0" was given for every wrong answer. The total score was 23. No negative score was given.

### Feasibility of the study

Tool was on ten samples that were selected to check the feasibility of the tool and sample. Investigator found that tool and sample were feasible. The study was assessed by conducting a pilot study. These samples were excluded from the main study.

### Pilot study

A pilot study is a miniature run of the main study. The pilot study was conducted in selected hospitals Pune city from October 4, 2016, to October 9, 2016, as per laid down criteria ten samples were by non-probability convenient sampling who were available during the study. On the 1<sup>st</sup> day of study, a pre-test was conducted to assess the knowledge of postnatal mothers regarding perineal care. A structured questionnaire was administered to each sample. After the pre-test, planned health teaching on perineal care was administered. The post-test was administered with the same questionnaire after 6 days. The findings of the pilot study were analyzed. The pilot study helped the investigator to visualize the practical problem that could be encountered while conducting the main study.

### Data collection

Data collection is a precise, systematic method of gathering information relevant to the research problem. The data gathering process began from October 11, 2016, to November 6, 2016. The investigator obtained the necessary permission from the concerned authorities. The investigator introduced self and informed samples about the nature of the study so as to ensure better cooperation during the data collection. The investigator approached the postnatal mothers and prepared the sampling frame of those who met the inclusion criteria. Then, the researcher approached participants and explains the purposed of the study and how it will be beneficial for them. Investigator enquired about their willingness to participate in the study and obtained written consent. Investigator administered questionnaires for pre-test to them and gave necessary instructions. Once the questionnaire is completed, the investigator collected it back. After the pre-test, each study subject was provided planned health teaching and instructed for the requirement of retest after 6 days.

The post-test was administered with the same questionnaire on the 7<sup>th</sup> day. After the data gathering process, the investigator thanked all the study samples as well as authorities for their cooperation.

### Statistical analysis

The collected data pre-test and post-test scores were coded, tabulated, and analyzed using descriptive statistics (mean percentage, standard deviation) and inferential statistics. Significance difference between pre-test and post-test readings was tested using paired *t*-test; paired *t*-test explained as the obtained data are dependent hence:-

Consider X: Observations observed in the pre-test of 60 samples.

Y: Observations observed in the post-test of 60 samples.

## Results

### Section I

Distribution of sample according to demographic variable.

The above-mentioned table deals with the demographic data of samples with regard to age. The data given in Table 1 shows that the majority of 68% of samples belong to age group 18–23, 25% of samples belong to age group 24–29, whereas very few mothers 7% belong to age group 30–36.

The above-mentioned Table 2 deals with the distribution of samples with regard to their educational status. In this study, the majority of 48% are having secondary educational qualifications, 18% are having higher secondary, and 7% are graduate and postgraduate.

The above-mentioned Table 3 deals with the distribution of the samples in relation to their monthly family income. The majority 46% of the samples have monthly income around Rs. 3000, 37% has Rs. 3000–6000, and 10% has Rs. 6000–9000, whereas 7% has above Rs. 9000.

The above-mentioned Table 4 deals with the distribution of the samples in regard to their number of delivery. Majority 45% of samples are delivered twice, 13% are delivered thrice, whereas only 2% of samples delivered more than thrice.

### Section II

#### *Pre-test scores regarding knowledge of perineal care among postnatal mothers*

This section deals with the analysis of pre-test knowledge scores of postnatal mothers regarding perineal care.

**Table 1:** Age-wise frequency and distribution of samples ( $n=60$ )

Age group	Frequency	Percentage
18–23 years	41	68
24–29 years	15	25
30–36 years	4	7
37–45 years	0	0

**Table 2:** Distribution of samples according to education ( $n=60$ )

Education	Frequency	Percentage
Primary	16	27
Secondary	29	48
Higher secondary	11	18
Graduate and postgraduate	4	7

Table 5 deals with the pre-test knowledge score of postnatal mothers regarding perineal care. It shows that 63% of samples know about the meaning of perineal care. About 35% of the samples know about the purpose of perineal care. About 51% of samples knew which article not needed for perineal care, while 41% of the samples had knowledge of reason behind the observation of lochia. About 73% of the samples had responded correctly about the color of lochia in the first 3 days. About 60% of the samples knew the normal odor of lochia. About 48.33% of the samples had responded correctly for the normal duration of lochia. About 60% of the sample had knowledge about the method of disposing sanitary pad. About 71.66% of the samples responded correctly for a reason behind the disposing sanitary pad. About 48.33% of the samples responded correctly for a reason behind the emptying of bowel and bladder before doing perineal care. About 75% of the samples responded correctly for a reason behind handwashing before and after perineal care, whereas 36% of the samples knew minimum duration for handwashing while doing perineal care. About 66.66% of the samples knew the reason behind the use of antibiotic soap in perineal care. About 46.66% of samples had knowledge about the method of applying antiseptic soap on genitalia. About 41.66% of samples knew the method of washing genitalia after the application of soap on genitalia. 50% of samples responded correctly that the first action to be performed after washing genitalia with clean water. About 61.66% of samples had knowledge about the complication of ignorance toward perineal care, while 6.66% of the samples knew the early sign of puerperal infection. 21.66% of samples had responded correctly regarding the appropriate method of checking the temperature of the water before doing perineal care, while 88.33% of the samples knew the correct person for approaching advice of using ointment and sprays while doing perineal care in puerperium; 31.66% of the samples knew when to meet a physician in puerperium as early as possible and 16.66% of samples knew a minimum number of time perineal care should be done in puerperium and 11.66% of samples responded correctly for a total duration of postpartum perineal care.

**Table 3:** Distribution of samples according to the monthly family income ( $n=60$ )

Monthly family income	Frequency	Percentage
Up to Rs. 3000/-	28	46
Rs. 3001/–6000/-	22	37
Rs. 6001/–9000/-	6	10
Rs. 9001/ and above	4	7

**Table 4:** Distribution of samples according to the number of delivery ( $n=60$ )

Number of delivery	Frequency	Percentage
Once	24	40
Twice	27	45
Thrice	8	13
More than thrice	1	2

**Table 5:** Distribution of pre-test knowledge scores of postnatal mothers regarding perineal care ( $n=60$ )

Knowledge area	Pre-test scores	
	Frequency (n)	Percentage
Meaning of perineal care	38	63.33
Purpose of perineal care	21	35
Article needed for perineal care	31	51.66
Knowledge regard to reason for observation of lochia	25	41.66
The color of lochia in puerperium in first 3 days	44	73.33
The normal odor of lochia in puerperium	36	60
Knowledge regarding the duration of lochia	29	48.33
The method of disposing sanitary pad	36	60
Reason for disposing sanitary pad	43	71.66
Reason for emptying bowel and bladder before perineal care	29	48.33
Reason for handwashing before and after perineal care	45	75
The minimum duration for handwashing	22	36.66
Reason for using antiseptic soap in perineal care	40	66.66
The method of soap application over genitalia	28	46.66
The method of washing genitalia	25	41.66
First action to be performed after washing genitalia	30	50
Complication of ignorance toward perineal care	37	61.66
First symptom of puerperal infection	4	6.66
Method of checking temperature of water before perineal care	13	21.66
Knowledge regard to appropriate person for seeking advice of using ointments and sprays in perineal care	53	88.33
A vaginal discharge in puerperium for which early visit to doctor is necessary	19	31.66
Knowledge regarding the minimum no. of times perineal care in a day	10	16.66
The total week of duration for postpartum perineal care	7	11.66

### Section III

#### *Post-test scores regarding knowledge of perineal care among postnatal mothers*

This section deals with the analysis of post-test knowledge scores of postnatal mothers regarding perineal care.

Table 6 deals with the post-test knowledge score of postnatal mothers regarding perineal care. It shows that 98.33% of samples know about the meaning of perineal care. About 86.66% of the samples know about the purpose of perineal care. About 85% of samples knew which article not needed for perineal care, while 80% of the samples had knowledge of reason behind the observation of lochia. About 88.33% of the samples had responded correctly about the color of lochia in the first 3 days. About 93.33% of the samples knew the normal odor of lochia. About 86.66% of the samples had responded correctly for the normal duration of lochia. About 91.66% of the sample had knowledge about the method of disposing sanitary pad. About 81.66% of the samples responded correctly for a reason behind the disposing sanitary pad. About 86.66% of the samples responded correctly for a reason behind the emptying of bowel and bladder before doing perineal care. About 88.33% of the samples responded correctly for a reason behind handwashing before and after perineal care,

whereas 83.33% of the samples knew minimum duration for handwashing while doing perineal care. About 88.33% of the samples knew the reason behind the use of antiseptic soap in perineal care. About 78.33% of samples had knowledge about the method of applying antiseptic soap on genitalia. About 78.33% of samples knew the method of washing genitalia after the application of soap on genitalia. About 76.66% of samples responded correctly that the first action to be performed after washing genitalia with clean water. About 75% of samples had knowledge about complications of ignorance toward perineal care, while 70% of the samples knew the early sign of puerperal infection. About 73.33% of samples had responded correctly regarding appropriate method of checking the temperature of the water before doing perineal care, while 88.33% of the samples knew the correct person for approaching advice of using ointment and sprays while doing perineal care in puerperium; 71.66% of the samples knew when to meet a physician in puerperium as early as possible; and 75% of samples knew a minimum number of time perineal care should be done in puerperium and 75% of samples responded correctly for the total duration of postpartum perineal care.

Hence, the findings suggest that there is a significant increase in the post-test knowledge score after administering planned health teaching on perineal care.

**Table 6:** Distribution of post-test knowledge scores of postnatal mothers regarding perineal care.  $n=60$ 

Knowledge area	Pre-test scores	
	Frequency (n)	Percentage %
Meaning of perineal care	59	98.33
Purpose of perineal care	52	86.66
Article needed for perineal care	51	85
Knowledge regard to reason for observation of lochia	48	80
The color of lochia in puerperium in first 3 days	53	88.33
The normal odor of lochia in puerperium	56	93.33
Knowledge regarding the duration of lochia	52	86.66
The method of disposing sanitary pad	55	91.66
Reason for disposing sanitary pad	49	81.66
Reason for emptying bowel and bladder before perineal care	52	86.66
Reason for handwashing before and after perineal care	53	88.33
The minimum duration for handwashing	50	83.33
Reason for using antiseptic soap in perineal care	53	88.33
The method of soap application over genitalia	47	78.33
The method of washing genitalia	47	78.33
First action to be performed after washing genitalia	46	76.66
Complication of ignorance toward perineal care	45	75
First symptom of puerperal infection	42	70
Method of checking temperature of water before perineal care	44	73.33
Knowledge regard to appropriate person for seeking advice of using ointments and sprays in perineal care	53	88.33
A vaginal discharge in puerperium for which early visit to doctor is necessary	43	71.66
Knowledge regarding the minimum no. of times perineal care in a day	45	75
The total week of duration for postpartum perineal care	45	75

#### Section IV

##### *Compare pre-test and post-test knowledge score of perineal care among postnatal mothers*

This section deals with a comparison of data to determine the significance of the difference between pre-test and post-test knowledge score of the sample.  $P$  value is calculated using a paired  $t$ -test.

$H_0$ : There is no significant difference in the pre-test and post-test knowledge scores of postnatal mothers about perineal care after the administration of planned health teaching

$H_1$ : There is a significant difference in the pre-test and post-test knowledge scores of postnatal mothers about perineal care after the administration of planned health teaching.

From the above-mentioned Table 7, it is evident that the obtained pre- and post-test score  $t = 14.88317$  and  $P = 0.000000625$  which is  $<0.05$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective.

The above data indicated that mothers, after receiving planned health teaching on perineal care, had higher

knowledge scores in the post-test than pre-test; hence, we reject the null hypothesis and accept research hypothesis. It can be concluded that the planned health teaching in postnatal mothers was effective in delivering knowledge.

The above-mentioned Table 8 shows that the pre-test score of 19 samples is poor, 41 samples are in average, whereas nobody is in a good category. While in the post-test, 37 are in a good category and 23 of the samples belong to the average category, whereas nobody is in the poor category.

From the above-mentioned Table 9, it is evident that the obtained pre- and post-test score knowledge in relation to the meaning of perineal care. Of which in the pre-test, 38 mothers and in the post-test, 59 mothers are having knowledge regarding the meaning of perineal care. Thus, it is concluded that the planned health teaching was effective.

From the above-mentioned Table 10, it is evident that the obtained pre- and post-test score knowledge in relation to the purpose of perineal care. Of which in the pre-test, 21 mothers and in the post-test, 52 mothers are having knowledge regarding the purpose of perineal care. Thus, it is concluded that the planned health teaching was effective.

From the above-mentioned Table 11, it is evident that the obtained pre-test and post-test scores regarding the procedure of perineal care have  $t = 9.485341$ ; table value is 2.0000995 and  $P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective.

From the above-mentioned Table 12, it is evident that the obtained pre-test and post-test scores regarding ignorance toward perineal care have  $t = 6.79465$ ; table value is 2.0000995 and  $P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective.

From the above-mentioned Table 13, it is evident that the obtained pre-test and post-test scores regarding important tips of perineal care have  $t = 16.39768$ ; table value is 2.0000995 and  $P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective.

Thus, it shows that the post-test knowledge score is significantly higher than the pre-test score in all five areas.

**Table 7:** Significance of difference between pre-test and post-test knowledge score in relation to knowledge of postnatal mothers regarding perineal care ( $n=60$ )

Overall	Pre-test	Post-test	$t$ -cal	$t$ -table	$P$ -value
Mean	11.08333	19	14.88317	2.66	0.00000625
SD	3.47511	2.213594			

**Table 8:** Distribution of sample with regard to the level of knowledge score ( $n=60$ )

Grade	Knowledge level	
	Pre-test	Post-test
Poor	19	0
Average	41	23
Good	0	37

**Table 9:** Significance of difference between pre-test and post-test knowledge score in relation to the meaning of perineal care ( $n=60$ )

Test	No. of samples given correct answer for meaning	Percentage
Pre-test	38	63.3333
Post-test	59	98.3333

**Table 10:** Significance of difference between pre-test and post-test knowledge score in relation to the purpose of perineal care ( $n=60$ )

Test	No. of samples given correct answer for purpose	Percentage
Pre-test	21	35
Post-test	52	86.66667

Thus, it is concluded that the planned health teaching was effective.

## Section V

### Correlation of knowledge score with demographic variables

This section deals with the correlation of post-test knowledge scores with demographic variables. The correlation is done by Chi-square test.

Hence, as per the analysis, none of the demographic variables are correlated with the post-test knowledge score.

## Discussion

The findings of the study were based on the objectives of the study to assess the existing knowledge regarding perineal care among postnatal mothers, to assess the post-test knowledge score of perineal care among postnatal mothers, to compare pre-test and post-test knowledge score of perineal care among postnatal mothers, and to correlate post-test knowledge score with selected demographic variables. The pre-test score of 19 samples is poor, 41 samples are in average, whereas nobody is in a good category. While in the post-test, 37 are in good category and 23 of the samples belong to the average category, whereas nobody is in the poor category.

Obtained pre- and post-test score knowledge in relation to the meaning of perineal care was evident. Of which in the pre-test 38 mothers and in the post-test, 59 mothers are having knowledge regarding the meaning of perineal care. Thus, it is concluded that the planned health teaching was effective.

**Table 11:** Significance of difference between pre-test and post-test knowledge score in relation to the procedure of perineal care

Overall	Pre-test	Post-test	$t$ -cal	$t$ -table	$P$ -value
Mean	7.72	11.87	9.485341	2.000995	0.000 S,
SD	2.858273	1.8208667			$P<0.001$

**Table 12:** Significance of difference between pre-test and post-test knowledge score in relation toward ignorance of perineal care

Overall	Pre-test	Post-test	$t$ -cal	$t$ -table	$P$ -value
Mean	0.68	1.45	6.79465	2.000995	0.000 s,
SD	0.562485	0.66895441			$P<0.001$

**Table 13:** Significance of difference between pre-test and post-test knowledge score in the relation of important tips of perineal care

Overall	Pre-test	Post-test	$t$ -cal	$t$ -table	$P$ -value
Mean	1.70	3.83	16.39768	2.000995	0.000 s,
SD	0.781025	0.63683244			$P<0.001$

Obtained pre- and post-test score knowledge in relation to the purpose of perineal care was evident. Of which in the pre-test, 21 mothers and in the post-test, 52 mothers are having knowledge regarding the purpose of perineal care. Thus, it is concluded that the planned health teaching was effective. Obtained pre-test and post-test scores regarding the procedure of perineal care have  $t = 9.485341$ ; table value is 2.0000995 and  $P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective. Obtained pre-test and post-test scores regarding ignorance toward perineal care have  $t = 6.79465$ ; table value is 2.0000995 and  $P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective. Obtained pre-test and post-test scores regarding important tips of perineal care have  $t = 16.39768$ ; table value is 2.0000995 and

$P = 0.000$  which is  $<0.01$ ; hence,  $H_0$  is rejected and hence  $H_1$  is accepted. Thus, it is concluded that the planned health teaching was effective Tables 14-21.

Noronha, May 2004, stated the effectiveness of teaching on perineal care among primipara women. The program was effective in increasing the knowledge and she found there was no significant difference between the post-test knowledge of the three groups.

The present study also supports that the planned health teaching was effective in enhancing knowledge of postnatal mothers.<sup>[10]</sup>

UN Joint Action Plan 2010 suggests that there are around 350,000–500,000 maternal deaths per year, with 15 million

**Table 14:** Significant of difference on the level of knowledge score of postnatal mothers regarding perineal care in relation to age

Overall	Age		
	18–23	24–29	30–36
Poor	0	0	0
Average	20	1	2
Good	21	14	2

**Table 15:** Significant of difference on knowledge of postnatal mothers regarding perineal care in relation to age (Chi-square test) ( $n=60$ )

Chi-square calculated value	Chi-square table value	P-value	Df
3.48	5.991465	0.149 NS, $P>0.05$	2

No significant correlation is found between the post-test score and age of mothers ( $P=0.149$ )

**Table 16:** Significant of difference on the level of knowledge score of postnatal mothers regarding perineal care in relation to education

Overall	Education			
	Primary	Secondary	Higher secondary	Graduate and postgraduate
Poor	0	0	0	0
Average	12	7	4	0
Good	4	22	7	4

**Table 17:** Significant of difference on knowledge of postnatal mothers regarding perineal care in relation to education (Chi-square test) ( $n=60$ )

Chi-square calculated value	Chi-square table value	P-value	Df
4.073	7.81428	0.34 NS, $P>0.05$	3

No significant correlation is found between the post-test score and education of mothers ( $P=0.34$ )

**Table 18:** Significant of difference on level of knowledge score of postnatal mothers regarding perineal care in relation to monthly family income

Overall	Monthly family income			
	<Rs. 3000	Rs. 3000–6000	Rs. 6000–9000	Rs. 9000 and above
Poor	0	0	0	0
Average	14	8	0	1
Good	14	14	6	3

**Table 19:** Significant of difference on knowledge of postnatal mothers regarding perineal care in relation to monthly family income (Chi-square test) ( $n=60$ )

Chi-square calculated value	Chi-square table value	P-value	Df
3.86	7.814728	0.175 NS, $P>0.05$	3

No significant correlation is found between the post-test score and monthly family income of mothers ( $P=0.175$ )

**Table 20:** Significant of difference on level of knowledge score of postnatal mothers regarding perineal care in relation to the number of delivery

Overall	Number of delivery			
	1	2	3	4
Poor	0	0	0	0
Average	9	8	5	1
Good	15	19	3	0

**Table 21:** Significant of difference on knowledge of postnatal mothers regarding perineal care in relation to the number of delivery (Chi-square test) ( $n=60$ )

Chi-square calculated value	Chi-square table value	P value	Df
1.67	5.991465	0.763 NS, $P>0.05$	2

No significant correlation is found between post-test score and number of delivery of mothers ( $P=0.763$ )

more women suffering long-lasting injury or illness from preventable pregnancy-related causes and complications. The unique aspects of this postnatal period have enormous implications not only for maternal health and disorder among them but also for neonate as well.<sup>[2]</sup>

Eason *et al.*, 2000 stated that there is variation in the knowledge of perineal care among postnatal mothers. The proper perineal care taught to postnatal mothers may help in bringing down the incidence of puerperal infections.<sup>[11]</sup>

Today puerperal infections are still a major cause of maternal mortality in developing countries and, to a lesser degree, in developed countries, so proper care of the perineum after childbirth is very important to avoid infection and to speed healing of the rectal and pelvic muscles.<sup>[12]</sup>

In the 19<sup>th</sup> century, the notorious childbed fever took many victims. Hence, this study was conducted to enhance knowledge of postnatal mothers on perineal care through planned health teaching.<sup>[6]</sup>

## Conclusion

The planned health teaching significantly brought out improvement in the knowledge of postnatal mothers regarding perineal care. Analysis of data showed that there was a significant difference between pre-test and post-test knowledge scores.

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