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# "To Evaluate the Effectiveness of Self Instructional Module Regarding Perineal Care among Primipara Postnatal Mothers"

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#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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# ABSTRACT

**Background:** Perineal trauma, particularly caused following vaginal delivery, is associated with short and long-term morbidity for women; therefore, intervention that increases the probability of an intact perineum is necessary. When a child is born, the mother and the postnatal period are both extremely vulnerable.

**Objectives:** 1. To assess the pretest knowledge regarding perineal care in primipara postnatal mothers. 2. To assess the posttest knowledge regarding perineal care in primipara postnatal mothers. 3. To assess the effectiveness of Self Instructional Module on knowledge regarding perineal care in primipara postnatal mothers. 4. To associate the posttest knowledge score regarding perineal care in primipara postnatal mothers with demographic variables.

Materials and Methods: A pre-experimental one-group pretest and posttest design was adopted

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to assess the effectiveness of a self-instruction module on knowledge regarding perineal care among primipara postnatal mothers. This study was carried out using inferential and descriptive data. The techniques for testing knowledge regarding perineal care among primipara postnatal mothers are discussed in this chapter. It comprises a research method description, the design and validation of the tools and questionaries, the data collection procedure and data analysis plan, the identification of targets, and the sample and sampling techniques.

**Results:** Better care with regular maintenance of hygiene of perineal area among the primipara postnatal mothers in selected area in Wardha district allow them from preventing from perineal discomfort and infection and a better quality of life with other intervention and by providing knowledge.

Keywords: Perineal care; self instructional module; knowledge.

#### 1. INTRODUCTION

# *"The only thing more expensive than education is ignorance" [1]. (K.Park.)*

Traditional perineal therapy and related techniques vary by culture. There are numerous traditional, rituals, and ideals that are believed to protect mothers from dangers.

According to a World Health Organization estimate from 1993, there were 77.6 million maternal morbidities and 50.1 million maternal casualties throughout the world. On January 1, 1997, the Reproductive Child Health Program (RCHP) was started. The initiative aims to address 17 of the national health system's national health priorities. Policies that promote mother and child health (1983). It was one of those days. The binding priorities for MCH in the national health policy are to reduce maternal mortality from 100/100000 live births to 50/100000 live births [2].

The phrase "postnatal" comes from the Latin word "puer," which means "infant" and "Parer," which means "to be born." Postnatal time is both the mother and the neonate's most sensitive time. There is an unique meaning phase in the postnatal cycle. Early in the puerperium, a woman wants those who care for her to share her joy at the birth of her child [3].

Mothers' lives are saved by better postpartum care. All governments committed themselves to reducing maternal mortality until 2000 and even more by half by 2015 at the 1994 Cairo International Conference on Population and Development (ICPD). Perineal care should follow the same principles whether performed by a nurse or by the mother herself. Perineal care is used to prevent infection, remove odour, and improve the comfort of the lady. In both ordinary and professional sectors, the self-care movement in the nation is well-known. However, few people are aware of its origins and implications for nursing practise [4].

Current health educators play an important role in raising awareness of the risks to poor maternal health and improving women's health. As a result, one of the most important roles of nurses is to use this time to educate women, families, and communities about these practises [5].

The purpose of perineal care is twofold: first, to keep patient clean and comfortable, and secondly to prevent infections of the utero and perineal wounds by preventing infection and encouraging perineal injury healing, by removing lochia from external genitals. Whether a birth caused real perineal damage, Where females have limited knowledge of the occurrences and concern about the function of urine and bowel, the advice of midwives and clear information and comfort can be appreciated. The perineal wound gradually becomes less paternal for the majority of women [6].

#### 2. METHODS

A pre-experimental one-group pretest and posttest design was adopted to assess the effectiveness of a self-instruction module on knowledge regarding perineal care among primipara postnatal mothers. This study was carried out using inferential and descriptive data. The techniques for testing knowledge regarding perineal care among primipara postnatal mothers are discussed in this chapter. It comprises a research method description, the design and validation of the tools and questionaries, the data collection procedure and data analysis plan, the identification of targets, and the sample and sampling techniques. Mankar et al.; JPRI, 33(59B): 587-595, 2021; Article no.JPRI.76849

# 2.1 Population

Population is a category with unique characteristics of the member that a researcher is taking an interest in research. In the analysis the population consisted of primipara postnatal mothers.

# **2.2 Target Population**

The target population is aggregate of cases about which would like to generalize.

The target population for the present study is primipara postnatal mothers in Wardha.

#### 2.3 Sample

Sample is a sub set of population elements. An element is the most basic unit about which information is collected, in nursing research elements are usually human.

In this study sample where primipara mothers who are fulfilling the inclusion and exclusion criteria.

#### 2.4 Sample Size

In the study, sample size where 100 primipara mothers in AVBR Hospital.

# 2.5 Sampling Technique

Non-probability samples are chosen depending on the researcher's judgement in order to meet the research's objectives. Purposive sampling technique a type of non-probability sampling approach was found to be appropriate for the present study. Because of the time constraints, the investigator prefers to employ the sampling approach to finish the data collection in the allotted time. This will be produced based on the study's goal and a review of the literature.

#### 2.6 Criteria for Sample Selecting

The sample selection was based on the following inclusion and exclusion criteria.

#### 2.6.1 Inclusion criteria

- 1) Primipara Postnatal mothers who can read and understand English, Marathi and Hindi.
- 2) Primipara postnatal mothers who are willing to participate in the study.

3) Prinipara postnatal mothers who are present on the day of data collection.

#### 2.6.2 Exclusion criteria

1) Primipara postnatal mother should participate in similar type of project.

2) Primipara postnatal mother who are mentally ill.

# 2.7 Discription of Tools

#### 2.7.1 Tool

The tool comprised of two parts.

Part 1- Demographic variable.

It consisted of five items such as age, educational qualification, type of family, occupation, family income.

**Part II** - Structured knowledge assessment of perineal care among primipara postnatal mothers.

This structured knowledge questionnaire was of 34.78% and comprehension questions were 21.74% and application questions were 43.48%.

#### 2.8 Structured Questionaries

**Section 1:** Age, educational qualification, type of family, occupation, family income.

**Section 2:** It consist of structured knowledge questionnaire regarding perineal care among primipara postnatal mothers.

**Section 3:** It consist of self-instructional module for primipara postnatal mothers.

#### Scoring:

Score 1 was given for correct answer. Score 0 is given for wrong answer

Knowledge was graded from poor knowledge to very good based on score.

#### 2.9 Methods of Data Collection

In the data gathering process begins from 22 march 2021 to 27 march 2021 the investigator visited the AVBR Hospital and obtained necessary permission from the concerned authorities the investigator introduce herself and

inform them about the nature of the study so as to ensure better cooperation during data collection. The investigators approached the primipara mother of AVBRH and explain the purposes of study and explain how it will be beneficial for them. Investigator inquired their willingness in the participation in the study. The investigators collected primipara mothers one by one and make them comfortable and oriented them to the study. Administer questionnaires to them and instructed with each other. Then ones the questionnaires was completed investigator collected them back each subject required mean time of 20 min to complete the formulated questionnaires . The collection of the data was performed within the stipulated time. After the data gathering process the investigator thank all the study subject as well as the authorities for cooperation.

#### 3. RESULTS

The findings are organized and presented in four parts as shown below:

### 3.1 Section A: Distribution of Primipara Mothers with Regards to Demographic Variables

This section deals with percentage wise distribution of primipara postnatal mothers with regards to their demographic characteristics. A convenient sample of 100 subjects was drawn from the study population, who were from selected area. The data obtained to describe the sample characteristics including age, education, occupation, monthly family income (Rs) and type of family respectively.

# 3.2 Section B: Assessment of Level of Knowledge Regarding Perineal Care Among Primipara Postnatal Mothers in Selected Area

This section deals with the assessment of level of knowledge regarding perineal care among primipara postnatal mothers in selected area. The level of knowledge score is divided under following heading of poor, average, good and excellent.

Demographic Variables	No. of primipara postnatal mothers	Percentage (%)	
Age(yrs)	· · ·		
20-25 yrs	46	46	
25-30 yrs	32	32	
30-35 yrs	12	12	
>35 yrs	10	10	
Educational Level			
Primary	35	35	
Secondary	46	46	
Higher Secondary	14	14	
Graduation	4	4	
Post Graduation	1	1	
Occupation			
Govt. Employee	0	0	
Pvt. Employee	8	8	
Self Employed	30	30	
Daily Wages	42	42	
Unemployed	20	20	
Monthly Family Income(Rs)			
5000-10000 Rs	16	16	
10000-15000 Rs	67	67	
15000-20000 Rs	17	17	
>20000 Rs	0	0	
Type of family			
Nuclear	52	52	
Joint	43	43	
Extended	5	5	

 Table 1. Percentage wise distribution of Primipara postnatal mothers according to their demographic characteristics n=100

Level of pre test	Score Range	Level of Pre test Knowledge Score		
knowledge		No of primipara postnatal mothers	Percentage	
Poor	0-25%(1-5)	4	4	
Average	26-50%(6-10)	94	94	
Good	51-75%(11-15)	2	2	
Excellent	76-100%(16-20)	0	0	
Minimum score	· · · · ·	5		
Maximum score		12		
Mean knowledge score		7.76±1.31		
Mean % Knowledge Score		38.80±6.59		

Table 2. Assessment with level of pre test knowledge regarding perineal care among primipara
postnatal mothers n=100

The above Table 2 shows that 4% of the primipara postnatal mothers had poor level of knowledge score, 94% had average and 2% of primipara postnatal mothers good level of pre test knowledge score. Minimum knowledge score in pretest was 5 and maximum knowledge score in pretest was 12.Mean knowledge score in pretest was 7.76±1.31 and mean percentage of knowledge score in pre test was 38.80±6.59.

The below Table 3 shows that 1% of the primipara postnatal mothers had average level of knowledge score, 89% had good and 10% of primipara postnatal mothers excellent level of post test knowledge score. Minimum knowledge score in posttest was 10 and maximum knowledge score in posttest was 17.Mean knowledge score in posttest was 13.85±1.48 and mean percentage of knowledge score in post test was 69.25±7.43.

3.3 Section C: Evaluation of Effectiveness Self Instructional Module Regarding Perineal Care in Primipara Postnatal Mothers in Selected Area

This section deals with the effectiveness of Self Instructional Module regarding perineal care in primipara postnatal mothers in selected area. The hypothesis is tested statistically with distribution of posttest and posttest mean and standard deviation and mean percentage knowledge score. The levels of knowledge during the posttest and post test are compared to prove the effectiveness of Self Instructional Module. Significance of difference at 5% level of significance is tested with student's paired 't' test and tabulated 't' value is compared with calculated 't' value. Also the calculated 'p' values are compared with acceptable 'p' value i.e. 0.05.

Table 3. Assessment with level of post test knowledge regarding perineal care among<br/>primipara postnatal mothers n=100

Level of post test	Score Range	Level of Post test Knowledge Score		
knowledge	-	No of primipara postnatal mothers	Percentage	
Poor	0-25%(1-5)	0	0	
Average	26-50%(6-10)	1	1	
Good	51-75%(11-15)	89	89	
Excellent	76-100%(16-20)	10	10	
Minimum score		10		
Maximum score		17		
Mean knowledge score		13.85±1.48		
Mean % Knowledge Score		69.25±7.43		

 Table 4. Significance of difference between knowledge score in post and posttest of primipara postnatal mothers n=100

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	7.76	1.31	6.09±1.79	33.86	0.0001
Post Test	13.85	1.48			S,p<0.05

This section deals with the effectiveness of Self Instructional Module regarding perineal care in primipara postnatal mothers in selected area. The hypothesis is tested statistically with distribution of posttest and posttest mean and standard deviation and mean percentage knowledge score. The levels of knowledge during the posttest and post test are compared to prove the effectiveness of Self Instructional Module. Significance of difference at 5% level of significance is tested with student's paired 't' test and tabulated 't' value is compared with calculated 't' value. Also the calculated 'p' values are compared with acceptable 'p' value i.e. 0.05.

### 3.4 Section D: Association of Level of Post Test Knowledge Score Regarding Perineal Care among Primipara Postnatal Mothers in Relation to Demographic Variables

This Table 5 shows the association of knowledge score with age in years of primipara postnatal mothers from selected area. The tabulated 'F' values was 2.68(df=3,96) which is much higher than the calculated 'F' i.e. 0.24 at 5% level of significance. Also the calculated 'p'=0.86 which was much higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that age in years of primipara postnatal mothers is statistically not associated with their post test knowledge score.

This Table 6 shows the association of knowledge score with educational level of primipara

postnatal mothers from selected area. The tabulated 'F' values was 2.45(df=4,95) which is much less than the calculated 'F' i.e. 3.43 at 5% level of significance. Also the calculated 'p'=0.011 which was much less than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that educational level of primipara postnatal mothers is statistically associated with their post test knowledge score.

#### 4. DISCUSSION

The aim of the present study was to evaluate the effect of self perineal care instructions on episiotomy pain and wound healing of postpartum women. The current study's findings confirmed the prediction that women who received self-perineal care instructions would have less postpartum perineal discomfort and faster wound healing than those who did not, as well as a reduction in pain interfering with postpartum women's daily activities [7].

The woman who has an episiotomy has more blood loss during delivery, and there is a risk of poor wound healing and higher discomfort in the early postpartum period. Postpartum discomfort and morbidity, such as bleeding and infection, are strongly linked to perineal injuries.Cleaning, cold packs, sits baths, and comprehensive perineal care are all examples of care measures that can help with perineal healing. The adoption of a non-invasive alternative pain management technique proved helpful in decreasing perineal discomfort [8,9].

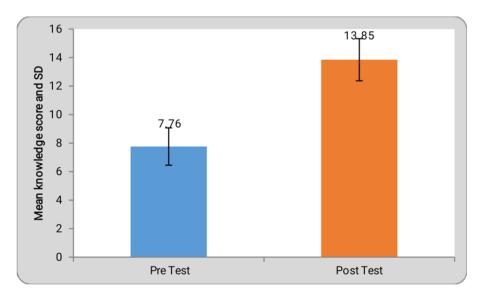


Fig. 1. Significance of difference between knowledge score in post and post test of primipara postnatal mothers

Age (yrs)	No. of primipara postnatal mothers	Mean posttest knowledge score	F-value	p-value
20-25 yrs	46	13.86±1.37	0.24	0.86
25-30 yrs	32	13.75±1.62		p>0.05,S
30-35 yrs	12	13.75±1.65		
>35 yrs	10	14.20±1.47		

Table 5. Association of post test knowledge score regarding Perineal Care in relation to age
n=100

Table 6. Association of post test knowledge score regarding perineal care in relation to
education n=100

Education	No. of primipara postnatal mothers	Mean posttest knowledge score	F-value	p-value
Primary	35	13.74±1.14	3.43	0.011
Secondary	46	13.63±1.49		S,p<0.05
Higher Secondary	14	14.07±1.85		·
Graduation	4	16.25±0.50		
Post Graduation	1	15±0		

After giving birth, most women experience some pain during the first few days after giving birth. Episiotomy is one of the most common causes of pain in the human body [10]. Interventions in nursing are designed to alleviate discomfort and enable the mother to care for herself and her child, as well as herself and her baby. It's easy to relieve the pain of perineal injuries by applying ice packs, using topical treatments (wet or dry), cleaning the perineum with a squeeze bottle, and taking a warm shower or sits bath. It was the goal of this study to determine how self-perineal care instructions affected episiotomy discomfort and wound healing in postpartum women after episiotomy [11].

Comparing cold gel pads to betadine for 5 days after episiotomy. In the case of episiotomy wound healing, this is a good alternative to surgery for epitomized individuals. It was discovered that the REEDA scale was significantly lower in the experimental group on the 5th and 7th postpartum days. They were consistent with the findings of the shady study, which showed that the most widely used treatment regimen is to let the wound heal by secondary intention, while packing and treating it frequently in the meantime. There was no difference in wound healing results between the 24-48-hour and 10-day postpartum REEDA scales. The number of gaping wounds 0.3 cm on day 10 was similar between groups [12].

#### **5. CONCLUSION**

This study comes to the following conclusion after a thorough examination the primipara

postnatal mothers. The amount of knowledge about the issues have significantly increased. A patient who visited the outpatient department and was admitted to Acharva Vinoba Bhave Rural Hospitals ward was chosen as the study subject. Following the implementation of self-instructional module on primipara postnatal mother regarding perineal care. The pre and post test knowledge score of mother on perineal care were assessed using a student paired t test. In all domains, a student paired t test was computed between the mean pretest knowledge score and the mean post test knowledge score. According to the finding 4% of individual have poor knowledge, 94% have average knowledge and 2% has good knowledge and 0% have excellent knowledge of perineal care among primipara postnatal а mothers. As consequences, the self instructional module was shown to be beneficial in improving comprehension of the perineal care among primipara post natal mothers.

#### 6. IMPLICATIONS

#### 6.1 Nursing Implications of the Study

The findings of this study have implication of nursing practice, nursing education, Nursing administration.

#### 6.1.1 Nursing Administration

The findings of the study can be used by making administrators to develop policies and plans for offering community education .This will aid thalassemia parents in their overall self-care by enabling for the detection of potentially harmful circumstances, notice of changes in health, and requests for necessary assistance.

#### 6.1.2 Nursing Practice

The findings of the study indicate that all team workers should be made aware of the need of observing, supervising, teaching and improving perineal care. Nursing personnel should conduct planned health education Programs in the maternity wards, OPD and community setting. It will be effective in promoting and reinforcing position health behavior. The nurse educator needs to prepare self instructional materials which can be studied at home with other family members. Health education can be imparted through mass media ie, through radio television, documentary films, pamphlets, etc.

#### 6.1.3 Nursing Education

- 1. This study has proved that improving knowledge of primi para postnatal mother regarding perineal care can improve their skills on self perineal care. Hence the importance of educating and demonstrating self perineal care can be adopted in the curriculum
- 2. Nursing person should be given inservice education to update their knowledge and skill regarding perineal care.

#### 6.1.4 Nursing Administration

The nurse administrator should arrange continuing education program for nursing personnel regarding perineal care. This will help the nurse administrator to prepare adequate learning material for giving health education in the ward and out patient setting. This will help the nurse administrator to emphasis and encourage the nurse to use different strategies for patient education regarding perineal care.

#### 7. RECOMMENDATIONS

Based on the findings of the study it is recommended that

- 1. A replication of present study can be conducted with a larger population.
- 2. A similar study may be replicated with randomization in selecting the participants.
- 3. This study can be conducted in different settings in rural and urban areas and then
- 4. Due results can be compared.

- 5. A similar study can be conducted in slum
- 6. There is a need to seek and identify other variables also, which may determine the
- Difference between level of knowledge among the primipara postnatal mothers. A comparative study can be done between groups belonging to different communities and religions.

# 8. LIMITATION

Study is limited to primipara postnatal mothers of Acharya Vinoba Bhave Rural Hospital, Sawangi(M), Wardha.

# CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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