

# “Evaluate the Effectiveness of Perineal Care on Episiotomy Pain and Wound Healing among Postpartum Women”

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## Abstract

**Introduction:** Over 85% of women having a vaginal birth suffers perineal trauma. The rate of episiotomy was determined as 93.3% in primipara women and as 30.2% in multipara women. One of the most important aspects of perineal care is checking for signs of infection. Most women have some degree of discomfort during the first few postpartum days. One of the common causes of discomfort is episiotomy. These include swelling, lesions, rashes, sores and boils. Proper care of perineum after childbirth is very important in order to avoid infection and speed healing of rectal and pelvic muscles. The Objectives are 1. To assess the episiotomy wound healing and pain among post partum women in experimental and control group . 2. To evaluate the effectiveness of perineal care among post partum women 3. To compare the Episiotomy pain and wound healing among post partum women between experimental and control group.4. To determine the association between Episiotomy pain level and wound healing among postpartum women with their demographic variable.

**Material & Methods:** The Quasi Experimental post-test only control group design was adopted. With 60 postpartum women's were selected by non-probability convenient sampling technique. The prior consent was taken. Tool for data collection for Assessment of Episiotomy wound healing by REEDA scale and Numerical pain rating Scale for Episiotomy Pain.

**Results:** The Results of the study revealed that statistically significant reduction in the level of perineal pain at 6, 24, & 48 hours and three days postpartum between the two groups

A highly statistical significant difference between groups in relation to the interference of pain with walking, sitting, and urination at 24 & 48 hours, and at three days postpartum. Reduction in the REEDA scores of wound healing in experimental group as compared to control group. The current study concluded that, women who received perineal care on episiotomy pain and wound healing during postpartum period have, lower the level of postpartum episiotomy pain scores, decrease pain related to perineal episiotomy which interfere with women's daily activities postpartum, such as walking, sitting, urination and defecation, and better wound healing progress. On the light of the study findings it is recommended that self perineal pain instruction can be introduced to the women antenatal and then it can be used postnatal, the nursing students should be taught the importance of relieving episiotomy pain and enhancing wound healing in postnatal mothers, and there is a need for extensive and intensive research in this area.

**Keywords:** Evaluate, Effectiveness, Perineal care, Episiotomy wound, Post Partum women.

## INTRODUCTION

Motherhood is a beautiful process whereby the mother safely delivers a child. It is the magic of creation. Care must be given to ensure safe childbirth. Safe motherhood initiative announced long back in 1987 had set targets to reduce maternal mortality rate by 50% in one decade. Labour is defined as a “series of events that take place in the genital organs in an effort to expel the viable products of conception out of the womb through the vagina into the outer world”. Labour passes mainly through four stages of which first stage lasts for 12 hours in primigravidae and 6 hours in multi Para. The second stage lasts for 2 hours in primigravidae and 30 minutes in multipara. The third stage lasts for 15 minutes in both primigravidae and in multipara. The fourth stage is called as an observational phase lasting for at least 1hour in both mother and baby in multipara and primigravida[1].

Midwives have cared for women during childbirth for thousands of years. The meaning of the word midwife is "with woman," and the midwife's role is to offer supportive care to the expectant mother. In general, midwives use fewer interventions than obstetricians and place greater trust in birth as a normal process[2]. During labour, midwives can literally play a vital role they will be there throughout the birth to 2 reassure the parents, administer pain relief, encourage the mother with her breathing, talk her through the different stages of labour and eventually deliver the baby[3].

An episiotomy also known as perineotomy, is surgically planned incision on the perineum and the posterior vaginal wall during second stage of labor. The incision, which can be midline or at an angle from the posterior end of the vulva, is performed under local anesthetic, and is sutured closed after delivery. Episiotomy is done as prophylaxis against soft-tissue-trauma. Vaginal tears can occur during childbirth, most often at the vaginal opening as the baby's head passes through, especially if the baby descends quickly. The midwife or obstetrician may decide to make a surgical cut to the perineum with scissors or scalpel to make the baby's birth easier and prevent severe tears that can be difficult to repair. The cut is repaired with stitches. Some childbirth facilities have a policy of routine episiotomy [4]. There are mainly four types of episiotomy. Medio-lateral: The incision is made downward and outward from midpoint of fourchette either to right or left. It is directed diagonally in straight line which runs about 2.5 cm away from the anus. Median: The incision commences from centre of the fourchette and extends on posterior side along midline for 2.5 cm. Lateral: The incision starts from about 1 cm away from the centre of fourchette and extends laterally. 'J' shaped: The incision begins in the centre of the fourchette and is directed posteriorly along midline for about 1.5 cm and then directed downwards and outwards along 5 or 7 o'clock position to avoid the anal sphincter. This is also not done widely [4]. The first episiotomy was reported in 1741, being suggested as a way to prevent severe perineal tears. The worldwide rate of episiotomy increased dramatically in the early 1900's, coinciding with the move from women giving birth at home to having their baby in a hospital. This is when physicians became more involved in the normal, uncomplicated birth process[5].

with the healing process. These are: redness, edema, ecchymosis, discharge and approximation of skin edges. Each category is assessed and a number assigned for a total REEDA score ranging from 0–15. The higher scores indicate increased tissue trauma. This tool appears to be the first systematic attempt to evaluate postpartum healing, which acknowledges the need for a standardized assessment tool independent of the severity of the perineal injury[6].

## OBJECTIVES:

1. To assess the episiotomy wound healing among post partum women in experimental and control group
2. To assess the pain level on episiotomy wound among post partum women in experimental and control group.
3. To evaluate the effectiveness of perineal care among post partum women in experimental and control group.
4. To compare the Episiotomy pain and wound healing among post partum women between experimental and control group.
5. To determine the association between Episiotomy pain level and wound healing among postpartum women with their demographic variable.

## HYPOTHESES:

H1: There will be significant difference between the perineal care on Episiotomy pain in experimental group at 0.05 level of significant after administration of Numerical pain scale.

H2 : There will be significant difference between the perineal care on Episiotomy wound healing in experimental group at 0.05 level of significant after assessment of REEDA scale.

H3 : There will be significant association between the perineal care on Episiotomy pain with selected demographic variables in experimental group at 0.05 level of significant.

H4 : There will be significant association between the perineal care on Episiotomy wound healing with selected demographic variables in experimental group at 0.05 level of significant.

## Material and Method:

Research Approach: Quantitative research approach.

Research Design: Quasi experimental –Post test only control group design

Research Variables:

1. Independent Variable: Perineal care
2. Dependent Variable: Episiotomy wound

Population: Postpartum women

Research Setting: The present study was conducted at Civil hospital , Nadiad.

Sampling Technique: Non-probability convenient sampling technique.

Sample Size: 60 postpartum women. (30-experimental and 30-control groups)

Sample Criteria:

- 1) Inclusion Criteria:

Postpartum Women:

- Patients who will give consent to participate in the study.
- postnatal mothers who are present at the time of data collection.
- Post natal mother who having episiotomy.
- Gestational age between 37-42 weeks.
- New born weight between 2500 to 4000 grams.
- No history of disease impaired wound healing
- Those who can understand Gujarati and Hindi language.

- 2) Exclusion criteria:

- Who will not available at the time of data collection.
- Who will not willing to participate.
- Who are taking other forms of treatment like antibiotic cream, Bitadin and savlon.

- Diagnosed with Diabetes, Coagulation disorders, Puerperal sepsis etc.
- Perineal tear grades 3 and 4
- Newborn hospitalization.
- Having vulvo vaginitis and hematoma or abscess in perineum,

Tools for Data Collection: The tool for data collection consists of the following section:

- Section A: Demographic variable consist of items on age, religion, education and income and obstetrical datetc..
- Section B: Assessment of Episiotomy wound healing by REEDA scale.
- Section C: Numerical pain rating Scale for Episiotomy Pain Assessment.

## STATISTICAL ANALYSIS:

The data were analyzed by using the SPSS Software. The frequency and percentage distribution are used to assess the demographic variables and the mean and standard deviation are used to describe the experimental and control group for level of episiotomy wound healing and pain among postpartum women. The paired t-test was used to compare episiotomy wound healing and Numerical pain scale on day1, day2, day3 and overall, Karl Pearson correlation formula was used to correlate the post test level of episiotomy wound healing and pain and Chi-square test was used to determine the association between mean differences. ANOVA F-test was carried out to find out significant effectiveness and the outcome of the ANOVA test evidence that there is significant effectiveness of perineal care on episiotomy level of pain at the level.

## RESULT: The results of this study are presented under five headings,

Demographic and obstetrical characteristics of women. Out of 60 samples, 43.3% (13) in experimental group & 66.7% (20) control group belong to age 22-25 years, 50% (15) belong to Hindu religion in experimental group and, 73.3% (22) belongs to Hindu religion from control group. 56.7% (17) in experimental and 83.3% (25) was primary-secondary educated, 46.7% (14) was doing Labour work in Experimental group and 63.3% (19) was housewife in control group, 36.7% (11) in experimental group and in 66.7% (20) control group belong to 5000rs -10001 monthly income, 46.7% (14) Experimental group and 56.7% (17) in control group have Joint family, 66.7% (20) in experimental group and 80% (20) in control group have area of residency in rural, 70% (21) in both group belong to no any bad habits

In Obstetrical data result was clearly state that 66.66% primigravida, 33.33% multigravida in experimental group, In type of Episiotomy there was 100% mediolateral Episiotomy in both group. Mostly postpartum mothers belongs to Gestational age 36.70% in 39 week, having 36.70% Experimental group in control group 43.30% in 38 weeks of gestational. In reason of episiotomy outcome was 30% for prevent birth injury in experimental group in control group refers to 53.30% prevent birth injury. Broadly postpartum women refers to 66.66% primigravida in experimental group & 73.33% primigravida in control group. In both group having normal delivery about 83.33% and 86.66%. Postpartum women mostly refers to 12 hourly duration of delivery in experimental and control group.

Table 1. Frequency and percentage distribution of postpartum women according post-test level of wound healing regarding perineal care.

Days	Wound Healing REEDA Scale	Experimental Group		Control Group	
		No.	%	No.	%
Day -1	Good Healing (0-5)	0	0%	0	0%
	Average Healing (6-10)	2	7%	6	20%
	Poor Healing (11-15)	28	93%	24	80%
Day -2	Good Healing (0-5)	0	0%	0	0%
	Average Healing (6-10)	29	97%	12	40%
	Poor Healing (11-15)	1	3%	18	60%
Day -3	<b>Good Healing (0-5)</b>	<b>17</b>	<b>57%</b>	<b>0</b>	<b>0%</b>
	<b>Average Healing (6-10)</b>	<b>13</b>	<b>43%</b>	<b>18</b>	<b>60%</b>
	<b>Poor Healing (11-15)</b>	<b>0</b>	<b>0%</b>	<b>12</b>	<b>40%</b>
Overall Mean	Good Healing (0-5)	0	0%	0	0%
	Average Healing (6-10)	30	100%	18	60%
	Poor Healing (11-15)	0	0%	12	40%

The above table 1 describes the percentage distribution of REEDA score on episiotomy wound healing of postpartum women's. The postpartum women's had good healing about 57% and 43% had average healing in Experimental group on 3rd day of perineal care. Where as in control group 40% of them had poor healing, and 60% of them had average healing due to no exposure to perineal care. Its evidence that there is significant difference in control and experimental group after perineal care. Hence, the stated hypothesis one was accepted due to significant differences between two groups.

Table 2. Frequency and percentage distribution of postpartum women according post-test level of pain regarding perineal care

Days	Level of Pain	Experimental Group		Control Group	
		No.	%	No.	%
Day -1	Mild Pain (1-3)	0	0%	0	0%
	Moderate Pain (4-6)	6	20%	23	77%
	Severe Pain (7-10)	24	80%	7	23%

Day -2	Mild Pain (1-3)	0	0%	0	0%
	Moderate Pain (4-6)	29	97%	11	37%
	Severe Pain (7-10)	1	3%	19	63%
Day -3	Mild Pain (1-3)	16	53%	0	0%
	Moderate Pain (4-6)	14	47%	21	70%
	Severe Pain (7-10)	0	0%	9	30%
<b>Overall Mean</b>	<b>Mild Pain (1-3)</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
	<b>Moderate Pain (4-6)</b>	<b>29</b>	<b>97%</b>	<b>8</b>	<b>27%</b>
	<b>Severe Pain (7-10)</b>	<b>1</b>	<b>3%</b>	<b>22</b>	<b>73%</b>

The above table 2 describes the percentage distribution of numerical pain scale score on episiotomy level of pain among postpartum women's. The postpartum women's on the day-3 had mild pain about 16 (53%) and (14) 47% had moderate pain in Experimental group on after perineal care. Where as in control group (21) 70% of them had moderate pain, and 9 (30%) of them had Severe pain due to no exposure to perineal care. Its evidence that there is significant difference in control and experimental group after perineal care. Hence, the stated hypothesis one was accepted due to significant differences between two groups.

Table 3. Effectiveness of perineal care on episiotomy level of pain (Numerical pain Scale) of postpartum women's in experimental group. (N=30)

Days	Level of Pain				Repeated measures ANOVA F-test
	Experimental Group				
	Range	Mean	Mean %	SD	
Day-1	3	7.10	71%	0.758	F=206.81 df=2 P=0.00 ***
Day-2	3	5.16	52%	0.791	
Day-3	4	3.46	35%	1.041	

The above table no. 3 shows the effectiveness of the perineal care on episiotomy level of pain among postpartum women's. Repeated measures ANOVA F-test was carried out to find out significant effectiveness and the outcome of the ANOVA test evidence that there is significant effectiveness of perineal care on episiotomy level of pain at the level of  $P < 0.05$ . The obtained "F"

Table 4. Comparison of Day1, Day2, Day 3 and overall mean post test scores of Numerical pain scale (level of pain)among postpartum women's

Numerical pain scale (level of pain)					
Day	Experimental		Control		Student's Independent t-test
	Mean	SD	Mean	SD	
Day 1	7.10	0.758	6.93	0.639	T value 0.920 Df 58 P value- 0.362
Day 2	8.56	1.104	6.73	0.639	<b>T value 7.868**</b> <b>df 58</b> <b>P value 0.000</b>
Day 3	3.466	1.041	6.266	0.739	<b>T value 12.04**</b> <b>df 58</b> <b>P value 0.000</b>
Overall Mean score	5.24	0.700	4.260	0.390	<b>T value 6.717**</b> <b>df 58</b> <b>P value 0.000</b>

The above table no 4 shows that Comparison Numerical pain scale on day1, day2, day3 and overall mean score of postpartum women's. There was a significant difference between post numerical pain scale score in terms of pain among postpartum women's in Experimental and control group. The obtained "t" was significant at 0.05 levels. So, hence the stated hypothesis for comparison was accepted. was significant at 0.05 levels. So, hence the stated hypothesis for effectiveness was accepted.

Table 5 Association between demographic variables of postpartum women's and level of wound healing and level of pain scale score in experimental group. (n=30)

Demographic Variable	Level of Wound Healing		$\chi^2$ Value	Table Value P-Value	Level of Pain		$\chi^2$ Value	Table Value P-Value
	Good	Average			Mild	Moderate		
<b>Age in years</b>								
18-21 Years								
22-25 Years	3	4	<b>1.439</b> df= 3	P>0.05 Sig 0.697	5	2	<b>4.813</b> df= 6	P>0.05 Sig 0.568
26-29 Years	8	6			6	7		
Above 30 Years	5	4			4	5		
	1	0			1	0		
<b>Religion</b>								
Hindu	8	7	<b>0.834</b> df= 2	P>0.05 Sig 0.659	5	10	<b>9.752</b> df= 4	<b>P&lt;0.05</b> <b>Sig 0.045</b> <b>9.48</b>
Muslim	5	2			6	1		
Christian	4	4			5	3		
Others	0	0			0	0		
<b>Education</b>								
Illiterate	4	0	<b>4.60</b> df= 3	P>0.05 Sig 0.203	2	2	<b>1.608</b> df= 6	P>0.05 Sig 0.952
Primary/-	8	9			9	8		
Secondary	4	4			4	4		
Graduate	1	0			1	0		
Post Graduate								
<b>Occupation</b>								
House wife	5	5	<b>0.427</b> df= 2	P>0.05 Sig 0.808	5	5	<b>4.432</b> df= 4	P>0.05 Sig 0.351
Labour	8	6			7	7		

Office work	4	2	NS	5.99	4	2	NS	9.48
<b>Monthly Income</b>								
Below 5000 Rs	3	0			1	2		
5001 – 10000 Rs	5	6	<b>3.283</b> df= 3	P>0.05 Sig 0.350 7.81	6	5	<b>4.904</b> df= 6	P>0.05 Sig 0.556 12.59
10001 – 15000 Rs	5	5	NS		4	6	NS	
Above 15000 Rs	4	2			5	1		
<b>Type of Family</b>								
Joint	7	7	<b>2.431</b> df= 2	P>0.05 Sig 0.297	7	7	<b>5.272</b> df= 4	P>0.05 Sig 0.261
Nuclear	3	4	NS	5.99	5	2	NS	9.48
Extended	7	2			4	5		
<b>Area of Residency</b>								
Rural	10	10	<b>1.086</b> df= 1	P>0.05 Sig 0.440	11	9	<b>2.259</b> df= 2	P>0.05 Sig 0.323
Urban	7	3	NS	3.84	5	5	NS	5.99
<b>Delivery done at</b>								
Private Hospital	6	0			3	3		
Govt. Hospital	5	10	<b>8.28</b> df= 2	<b>P&lt;0.05</b> Sig <b>0.016</b> 5.99	7	8	<b>3.801</b> df= 4	P>0.05 Sig 0.434
Trust Hospital	6	3	S		6	3	NS	9.48
Other	0	0			0	0		
<b>Bad Habit</b>								
Smoking	0	0			0	0		
Drinking	0	0			0	0		
Alcohol			<b>0.524</b> df= 1	P>0.05 Sig 0.691			<b>1.510</b> df= 2	P>0.05 Sig 0.470
Others	3	6	NS	3.84	5	4	NS	5.99
None of the Above	10	11			11	10		
<b>Food Pattern</b>								
Vegetarian	2	3	<b>0.679</b> df= 2	P>0.05 Sig 0.712	1	4	<b>8.62</b> df= 4	P>0.05 Sig 0.071
Non- Veg	9	6	NS	5.99	11	4	NS	9.48
Eggetarian	6	4			4	6		
<b>Type of Parity</b>								
Primigravida	7	7	<b>0.475</b> df= 1	P>0.05 Sig 0.491	7	7	<b>3.95</b> df= 2	P>0.05 Sig 0.139
Multigravida	10	6	NS	3.84	9	7	NS	5.99
<b>Type of Episiotomy</b>								
Medio Lateral	17	13	<b>Can't Be Computed</b>		16	14	<b>Can't Be Computed</b>	
Median	0	0			0	0		
Lateral	0	0			0	0		
J Shaped	0	0			0	0		

<b>Gestational Age</b>										
40 Week	3	0	<b>5.86</b>	P>0.05	2	1	<b>7.211</b>	P>0.05		
39 Weeks	8	3	df= 3	Sig 0.119	4	7	df= 6	Sig 0.302		
38 Weeks	4	7	<b>NS</b>	7.81	5	6	<b>NS</b>	12.59		
37 Weeks	2	3			5	0				
<b>Reason of Episiotomy</b>										
Rigid Perineum	4	1	<b>4.853</b>	P>0.05 Sig 0.183	4	1	<b>2.474</b>	P>0.05 Sig 0.871		
Big baby	5	3			4	4				
Prevent Birth injuries	6	3			5	4				
Prolonged labour	2	6			3	5				
<b>Previous place of Delivery</b>										
Home Delivery	0	0	<b>2.851</b>	P>0.05	0	0	<b>0.455</b>	P>0.05		
Institutional	2	1	df= 2	Sig 0.240	2	1	df= 2	Sig 0.797		
Primigravida	15	12	<b>NS</b>	5.99	14	10	<b>NS</b>	5.99		
<b>Type of Delivery</b>										
Normal Vaginal	15	10	<b>2.851</b>	P>0.05 Sig 0.240	14	8	<b>5.297</b>	P>0.05 Sig 0.258		
Forcep assisted	0	2			df= 2	0			2	df= 4
Vacum Delivery	2	1			<b>NS</b>	5.99			0	<b>NS</b>
					2	1				
<b>Duration of perineal care</b>										
Every 4 hours	0	0	<b>1.353</b>	P>0.05	0	0	<b>1.787</b>	P>0.05		
Every 8 Hours	1	0	df= 1	Sig 0.433	0	1	df= 2	Sig 0.409		
Every 12 Hours			<b>NS</b>	3.84	0	1	<b>NS</b>	5.99		
	12	17			16	13				

Note: S-Significant at 5% level (  $p < 0.05$ ), NS-Not significant at 5% level (  $p > 0.05$ ). (f)= Frequency, (%) =Percentage.

The table no.5 envisages the outcome of chi square analysis being carried out to bring out the association between the mean differences levels of wound healing and pain regarding perineal care on episiotomy among postpartum women with their selected demographic variables.

The calculated chi-square values higher than the table value at 0.05 level of significant. Which implies that there was association between the Demographic variable and Reeda score on episiotomy wound healing and pain level score in experimental group

Out of all demographic variable religion status with level of pain and place of delivery with level of wound healing were found significant associate P value  $< 0.05$  level.

Hence null hypothesis was rejected and research hypothesis was accepted as above mentioned selected demographic variables its evidence that there is significant difference between level of wound healing and level of pain postnatal mother demographic variables.

## CONCLUSION:

This study was concluded that the Perineal care On Episiotomy pain and wound healing was effective for postpartum women there was vast difference in the Experimental and Control group's Episiotomy wound healing and pain score of postpartum women. The study consisted of 60 samples that were selected on the basis of non-probability convenient sampling technique. The data analysis was done by calculating the mean, percentage, standard deviation, paired t-test and Karl's Pearson correlation coefficient method. The midwifery and community health nursing curriculum needs to be strengthened to enable nursing students to know about Perineal care and its importance.

Conflict of Interest: The author had declared that there was no conflict of interest.

Sources of Funding: Self.

Ethical Clearance: The study was approved by the Institutional Ethical Committee of Dinsha Patel College of Nursing, Nadiad. There were total 15 members in the committee from various fields. The Ethical approval reference number is DPCN/2ndIEC/2020-21/11 and a formal written permission was gathered from the authority of PHC of Kheda-Anand District.

Statement of Informed Consent: The informed consent form was taken from the postpartum women prior to the data collection of the study.

## REFERENCES

1. Dutta DC. Text book of obstetrics. 6th ed. Calcutta (IND): New central book agency; 2013
2. Case Holly. The role of the midwife during birth. [home page] 2011 Jun [cited 2012 Dec 23]; Available from: URL: <http://www.livestrong.com>
3. Admin. What role does the midwife involve. [home page] 2011 Feb [cited 2012 Dec 6]; Available from: URL: <http://www.studentmedics.com>
4. Episiotomy. [home page] 2012 Nov [cited 2012 Dec 13]; Available from: URL: <http://en.wikipedia.org/wiki/Episiotomy#Indications>
5. What is an episiotomy. [home page] [cited 2012 Nov 24]; Available from : URL: <http://www.birthing.com.au/Episiotomy-tearing/What-is-an-Episiotomy>
6. Episiotomy. British journal of midwifery [home page] 2009 Nov [cited 2012 Nov 6]; Available from : URL: <http://www.scribd.com/doc/96292508/Episiotomy>
7. Sheikhan F, Jahdi F, Khoei EM, Shamsalizadeh N, Sheikhan M, Haghani H et al. Episiotomy pain relief: use of lavender oil essence in primiparous Iranian women. Complement therclinpract [abstract] 2012 Aug [cited 2012 Dec 19]; 18(3): Available from: URL: <http://www.ncbi.nlm.nih.gov/pubmed/22196577>
8. Lavender. National center for complementary and alternative medicine [home page] 2012 Nov [cited 2012 Dec 15]; Available from: URL: <http://nccam.nih.gov/health/lavender/ata glance.htm>
9. Therapy for management of childbirth perineal tears. Available from: URL: <http://www.practicalpainmanagement.com> January 1, 2011.
10. Munro JM, Baskett TF, Calder AA, Arulkumaran S. Kerr's operative obstetrics. 11th ed. London: Elsevier Saunders; 2013. p.253. 72
11. Graham ID, Carroli G, Davies C, Medves JM. Episiotomy rates around the world: An update. Birth 2005; 32: 219-23.
12. Episiotomy rate in India. 2010 July 30. Available from: <http://jpubhealth.oxfordjournals.org/>
13. Effect of Self Perineal Care Instructions on Episiotomy Pain and Wound Healing of Postpartum Women. Available from: [https://www.researchgate.net/publication/308414766\\_Effect\\_of\\_Self\\_Perineal\\_Care\\_Instructions\\_on\\_Episiotomy\\_Pain\\_and\\_Wound\\_Healing\\_of\\_Postpartum\\_Women](https://www.researchgate.net/publication/308414766_Effect_of_Self_Perineal_Care_Instructions_on_Episiotomy_Pain_and_Wound_Healing_of_Postpartum_Women) [accessed Aug 16 2022].