A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF MEDICATED AND NON-MEDICATED SITZ BATH ON EPISIOTOMY WOUND HEALING AMONG POSTNATAL MOTHERS AT, MGMH, HYDERABAD

Mrs. N PADMASREE
Research Scholar,
SJJT University, Jhunjhunu,
RAJASTHAN.

Dr. Abdul Latif
Professor
SJJT University, Jhunjhunu,
RAJASTHAN.

ABSTRACT

Assess the wound healing level among postnatal mothers. Assess the effectiveness of Beta dine in episiotomy among postnatal mothers. Compare the level of wound healing in Beta dine wash and normal saline. Associate the level of wound healing in experimental group with selected demographic variables. Hypothesis: there is a significant increased level of wound healing episiotomy with Beta dine wash among postnatal mothers. Methodology: Quantitative approach- Pre- experimental design was adopted. Sample size was 100 (50 samples in Beta dine wash and 50 samples in normal saline), assigned by simple random sampling technique method was used. Data was collected using demographic variables and the level of wound healing to compare the Beta dine wash and normal saline episiotomy postnatal mothers Beta dine wash was given on Monday, Wednesday and Friday, and in the alternative days normal saline was given Tuesday, Thursday and Saturday. Beta dines wash for one week 10-20mins for one group and normal saline for another group Findings: In Beta dines wash the mean value for pre-test is 29.3 and standard deviation was 8.71. And post-test is 14.56 and standard deviation 9.92. Wilcox on rank sum test was Z=
-6.154, P- <0.00001, it will be significant and positive. In normal saline the mean value for pre-test is28.7 and standard deviation was 8.78. And post-test is 29.88 and standard deviation 9.01. Wilcox on rank sum test was Z= -6.1105, W-637.5, P-< 0.00001. Conclusion: The findings proved that Butadiene wash is more effective than normal saline to reduce the wound healing of episiotomy among postnatal mothers.

***KEYWORDS**: Beta dine Wash, Normal Saline, Wound Healing, Episiotomy and Postnatal Mother*

INTRODUCTION

Giving birth is a powerful and life changing event with a lasting impact on women and their families. Every woman who became pregnant has to undergo the process of delivery. Sometimes it may be normal or forceps, vacuum and caesarean section. In normal process of delivery the baby is delivered per vagina, an episiotomy is performed by health care provider or midwife.

The World Health Organization (WHO) recommends an episiotomy rate of 10% for normal deliveries. Although the frequency of performing an episiotomy is decreasing, 30% to 50% of women may still receive episiotomy.

The rate of episiotomy varies between 8% in Netherlands and 99% in Eastern Europe. Asian women are likely to require episiotomy compared with non-Asian women as Asian skin tends not to stretch as well as Caucasians. Perineal trauma during vaginal delivery is very common occurring in about 40% of primigravidae and 20% of multifarious women.

Episiotomy is a common surgical planned incision on the perineum and the posterior vaginal wall during the second stage of labour to enlarge the vaginal introitus so as to facilitate easy and safe delivery of the fetus, to minimize the overstretching and rupture of perineal muscles and fascia and to reduce the stress and strain on the fetal head. Episiotomy also helpful in

reduction in duration of second stage of labor. The first performance of episiotomy was done in 1742, when perineal incisions were used to facilitate deliveries.

Pritchard, Mac- Donald and Gant 1985, described that episiotomy reduces the incidence of cystocele, rectocele and stress incontinence. In cases where an episiotomy is indicated, a medio lateral incision may be preferable to a median (midline) incision as the latter is associated with a higher risk of injury to the anal sphincter and the rectum.

The problems associated with the procedure, include unsatisfactory anatomical results, increased blood loss, perineal pain and dyspareunia. The muscles of the perineum are involved in many activities like (sitting, walking, squatting, bending, urinating, and defecating). Thus, an incision in this area causes a great deal of discomfort.

A sitz bath or hip bath is a bath in which a person sits in water up to the hips. It is used to relieve discomfort and pain. The term sitz bath is derived from the German word Sit bad, meaning a bath (Bad) in which one sits (sitzen). Sitz baths may either be warm or cool. Warm baths are recommended for reducing the itching, pain and discomfort. An ordinary bathtub can be filled with 3 to 4inches (7.6 to 10.2cm) of hot water about 110°F (43°C), and sat in for 15–20 minutes or until the water cools down. Sitz bath is one of the easiest and more effective ways to ease pain and lessen discomfort associated with a painful condition in the pelvic area.

A quasi-experimental study conducted to assess the effectiveness of sitz bath in reduction of episiotomy pain and wound healing among postnatal mothers admitted in postnatal units of MGMH< Hyderabad. The sample was 60 postnatal mothers with episiotomy (30 in each experimental group and 30 in control group). Experimental group received sitz bath and control group received routine care. The data was analysed by using numerical pain rating scale and REEDA Scale to assess pain and wound healing. The result was found that application of sitz bath was effective in relieving episiotomy pain and improving wound healing (p=0.001).

Research statement

A Comparative Study to Assess the Effectiveness of Medicated and Non-Medicated Sitz Bath on Episiotomy Wound Healing among Postnatal women at MGMH, Hyderabad.

Objectives of the Study

1. To assess the effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group.
2. To assess the effectiveness of non-medicated sitz bath on episiotomy wound healing among postnatal mothers in control group.
3. To compare the post test level of episiotomy wound healing among postnatal mothers between experimental and control group.

Materials & methods

For the present study, Quantitative research approach and quasi-experimental design (Non–equivalent, post-test only) design was used. The research setting was Govt. SMGS Maternity Hospital, Jammu. The sample consisted of 40 postnatal mothers (20 in experimental 20 in control group) with episiotomy. Purposive sampling technique was used to select the sample. Prior to the data collection procedure, formal permission was obtained from the Medical

Superintendent of hospital. Socio-demographic profile, Obstetrical history variables tool and REEDA scale was used to collect personal information. Socio-demographic profile included items like age (in years), educational status, occupational status, family income, residence, religion and dietary pattern. Obstetrical History Variables included type of episiotomy, Parity, Antibiotics prescribed and Analgesics prescribed. The REEDA scale is used to assess the episiotomy wound healing after giving intervention. REEDA scale consists of 5 major assessment areas (redness, edema, ecchymosis/bruising, discharge, approximation). Each area is given a minimum score of 0 and maximum score of 3. The total score is 15. It is scored as No infection (0), mild infection (1-5), moderate infection (6-10) and severe infection (11-15). Measurement of wound was done by paper centimeter scale. The review of literature, expert's opinions and investigator's own experience provided the basis for construction of tool.

Data collection was done in January 2018. Prior to interview the questionnaire to the postnatal mothers, investigator gave self introduction to the subjects and explained the purpose of gathering information. A good rapport was established with the subjects. They were assured that their responses will be used kept confidential and the information will be used only for research purpose. Formal consent was taken from subjects. The time taken by each respondent for filling the tool was average for 15-20 minutes. The data gathered was analyzed and calculated by percentage, mean, standard deviation and't' test.

Results

Table 3A reveals the effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group. It shows that highest mean score (6.4±2.1) was obtained on day 1 whereas the lowest mean score (0.4±0.6) was obtained on day 3 after providing medicated sitz bath. Hence the difference in episiotomy wound healing among postnatal mothers was highly significant in experimental group.

Table 3B reveals the frequency and percentage distribution of episiotomy wound healing among postnatal mother in experimental group that on day 1, 14(70%) postnatal mothers had moderate infection and 6(30%) postnatal mothers had mild infection. On day 2, 19(95%) postnatal mothers had mild infection and 1(5%) postnatal mothers had no infection. On day 3, 13(65%) postnatal mothers had no infection and 7(35%) postnatal mothers had mild infection.

Table 4A reveals the effectiveness of non-medicated sitz bath on episiotomy wound healing among postnatal mothers in control group. . It shows that highest mean score (8.7±2.3) was obtained on day 1 whereas the lowest mean score (1.3±1.0) was obtained on day 3 after providing non- medicated sitz bath. Hence, the differences in Episiotomy wound healing among postnatal mothers were highly significant in control group.

Table 4B reveals the frequency and percentage distribution of episiotomy wound healing among postnatal mother in control group that on day 1, 13(65%) postnatal mothers had moderate infection, 5(25%) postnatal mothers had severe infection and 2(10%) postnatal mothers had mild infection. On day 2, 13(65%) postnatal mothers had mild infection and 7(35%) postnatal mothers had moderate infection. On day 3, 14(70%) postnatal mothers had mild infection and 6(30%) postnatal mothers had no infection.

Table 5 reveals the comparison the post test level of episiotomy wound healing among

postnatal mothers between experimental and control group. The highest mean score (6.4±2.1) was obtained on day 1 whereas the lowest mean score (0.4±0.6) was obtained on day 3 after providing medicated sitz bath in experimental group and the highest mean score (8.7±2.3) was obtained on day 1 whereas the lowest mean score (1.3±1.0) was obtained on day 3 after providing non- medicated sitz bath in control group. The obtained't' value on day 1(3.28), day 2(3.38) and day 3(3.57). The significant difference among post test shows that there is no significant difference was observed in experimental and control group. Both are equally effective.

Socio-demographic variables	**Experimental group (n=20)**		**Control group (n=20)**	
	Frequency	**% age**	**Frequency**	**% age**
Age in years				
<21 years	0	0	0	0
21-25 years	8	40	8	40
26-30 years	11	55	8	40
>30 years	1	5	4	20
1. **Educational status**				
Illiterate	0	0	0	0
Primary education	6	30	6	30
Secondary education	8	40	10	50
Graduate	6	30	4	20
Post Graduate	0	0	0	0
1.Occupational status				
Housewife	17	85	16	80
Private job	2	10	0	0
Govt job	1	5	4	20
2.Family income per month (in Rs.)				
<5001	0	0	0	0
5001-10000	6	30	7	35
10001-15000	7	35	8	40
15001-20000	6	30	4	20
>20000	1	5	1	5

Residence				
Rural	9	45	10	50
Urban	11	55	10	50
Religion				
Sikh	6	30	7	35
Christian	0	0	1	5
Hindu	14	70	12	60
Any others	0	0	0	0
Dietary pattern				
Vegetarian	13	65	13	65
Non-vegetarian	7	35	7	35

Table 1 Frequency and percentage distribution of demographic variables of postnatal mothers

Obstetrical history variables	**Experimental group (N=20)**	**Control group (N=20)**
	Frequency % age	**Frequency % age**
Type of Episiotomy		
Right medio-lateral	20 100.0	20 100.0
Left medio-lateral	0 0.0	0 0.0
Parity		
Primipara	11 55.0	12 60.0
Multipara	9 45.0	8 40.0
Antibiotics prescribed		
Amclox	9 45.0	11 55.0
Covatil	11 55.0	9 45.0
Analgesics prescribed		
Volsec-D	9 45.0	8 40.0
Zubidol-P	11 55.0	12 60.0

Table 2 Frequency and percentage distribution of obstetrical history variables of postnatal mothers

Experimental group (N=20)						
	n	**Range**	**Mean**	**Std**	**mean**	**f value**

					% age	p value
Day1	20	10-Feb	6.4	2.1	42.3	102.6,
Day2	20	0-5	2.5	1.3	16.7	0.000***
Day3	20	0-2	0.4	0.6	2.7	

Table 3A Effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group
*p<0.05, ***p<0.001 using ANOVAs with repetitive measures

Experimental group	Day 1		Day 2		Day 3	
	Frequency	% age	Frequency	% age	frequency	% age
No infection	0	0	1	5	13	65
Mild infection	6	30	19	95	7	35
Moderate infection	14	70	0	0	0	0
Severe Infection	0	0	0	0	0	0

Table 3B Frequency and percentage distribution of effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group

Control group (N=20)						
	n	Range	Mean	Std	Mean % age	f value p value
Day1	20	12-Apr	8.7	2.3	57.7	200.1,
Day2	20	08-Jan	4.4	2.1	29	0.000***
Day3	20	0-3	1.3	1	8.7	

Table 4A Effectiveness of non-medicated sitz bath on episiotomy wound healing among postnatal mothers in control group
*p<0.05, ***p<0.001 using ANOVAs with repetitive measures

Control group	Day1		Day2		Day3	
	frequency	% age	Frequency	% age	frequency	% age
No infection	0	0	0	0	6	30
Mild infection	2	10	13	65	14	70
Moderate infection	13	65	7	35	0	0
Severe Infection	5	25	0	0	0	0

Table 4B Frequency and percentage distribution of effectiveness of non- medicated sitz bath

on episiotomy wound healing among postnatal mothers in control group

Severity of infection - REEDA score							
Time of observation	Experimental Group (n=20)			Control group (n=20)			
	mean	SD	Mean% age	mean	SD	Mean% age	T p value
Day 1	6.4	2.1	42.3	8.7	2.3	57.7	3.28, 0.002*
Day 2	2.5	1.3	16.7	4.4	2.1	29	3.38, 0.002*
Day 3	0.4	0.6	2.7	1.3	1	8.7	3.57, 0.001***

Table 5 Comparison the post test level of episiotomy wound healing among postnatal mothers between experimental and control group
*p<0.05, ***p<0.001

Discussion

Objective 1: To assess the effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group.

The study results shows that highest mean score (6.4±2.1) was obtained on day 1 whereas the lowest mean score (0.4±0.6) was obtained on day 3 after providing medicated sitz bath. Hence the differences in episiotomy wound healing among postnatal mothers were highly significant in experimental group. It shows the effectiveness of medicated sitz bath on episiotomy wound healing among postnatal mothers in experimental group. A similar study conducted to assess the effects of olive oil sitz bath on improvement of perineal injury after delivery. Finding showed that there was a significant difference between the study and control group with regards to pain severity after 5 and 10 days (p<0.05), wound redness after 5days (p<0.0001) and redness (p<0.000), oedema (p<0.05) 10 days after delivery. Any case of ecchymosis, discharge and approximation (distance between the wound edges) was not observed in the olive group but those signs were observed in the control group. It shows effect of olive oil sitz bath on improvement of perineal injury after delivery.5 **Objective 2:** To assess the effectiveness of non-medicated sitz bath on episiotomy wound healing among postnatal mothers in control group.

The study results shows that highest mean score (8.7±2.3) was obtained on day 1 whereas the lowest mean score (1.3±1.0) was obtained on day 3 after providing non- medicated sitz bath. Hence the differences in episiotomy wound healing among postnatal mothers were highly significant in control group. It shows the effectiveness of non- medicated sitz bath on episiotomy wound healing among postnatal mothers in control group. A similar study conducted to assess the effectiveness of medicated and non-medicated sitz bath in episiotomy wound healing on postnatal mothers admitted in selected hospital at Bangalore. Finding shows that in medicated group on day 1 the mean is 5 and when it reaches to day 5 mean scores reduced to 0.64. In non-medicated group on day 1 mean is 5.04 and on day 5 mean scores reduced to 4.16. The mean percentage on day 1 in medicated group is 33.3 and on day 5 percentage reduced to 4.2, 33.6 on day 1in non-medicated group and day 5 shows small difference as 27.73. The obtained't' value on day 3(7.76), day 4(6.54) and day 5(7.17). It

shows episiotomy wound healing faster in medicated group than non-medicated group.13

Objective 3: To compare the post test level of episiotomy wound healing among postnatal mothers between experimental and control group.

The study result shows that highest mean score (6.4±2.1) was obtained on day 1 whereas the lowest mean score (0.4±0.6) was obtained on day 3 after providing medicated sitz bath in experimental group and the highest mean score (8.7±2.3) was obtained on day 1 whereas the lowest mean score (1.3±1.0) was obtained on day 3 after providing non- medicated sitz bath in control group. The obtained 't' value on day 1(3.28). day 2(3.38) and day 3(3.57). The significant difference among post test shows that there is no significant difference was observed in experimental and control group. Both are equally effective. A similar study conducted to assess the effectiveness of medicated and non-medicated sitz bath in episiotomy wound healing on postnatal mothers admitted in selected hospital at Bangalore.

Conclusion

Finding shows that in medicated group on day 1 the mean is 5 and when it reaches to day 5 mean scores reduced to 0.64. In non-medicated group on day 1 mean is 5.04 and on day 5 mean scores reduced to 4.16. The mean percentage on day 1 in medicated group is 33.3 and on day 5 percentage reduced to 4.2, 33.6 on day 1in non-medicated group and day 5 shows small difference as 27.73. The obtained 't' value on day 3(7.76), day 4(6.54) and day 5(7.17). It shows episiotomy wound healing faster in medicated group than non-medicated group.13

References

1. *Pore SY. Effectiveness of moist heat and dry heat application on healing of episiotomy wound. Asian Journal of Multidisciplinary Studies. 2014;2(7):225−236.*
2. *Suseela S. Reducing episiotomy pain through sitz bath. Nightingale Nursing Times. 2012;8(5):52−56.*
3. *Stuart C, Christoph L. Obstetrics by ten teachers, 18th ed. Arnold a member of the Hodder headline group, London; 2006: 220−254.*
4. *Pillitteri A. Maternal and Child health Nursing. 4th ed. Lippincott publishers, Philadelphia; 2003: 512−514.*
5. *Behmanesh F, Tofighi M. A Clinical trial to compare the effectiveness of Lavender essential oil and olive oil at healing postpartum mother's perineal. Health Med Journal. 2011;5(6):1512−1516.*
6. *Ali MR. Oleiwi S. Effectiveness of instruction-oriented intervention for primipara women upon episiotomy and self-perineal Care. Iraqi Science Journal of Nursing. 2010;23(2):8−17.*
7. *Dutta DC. Textbook of Obstetrics. 7th ed. Calcutta New Central Book Agency (P) LTD; 2007: 568.*
8. *American College of obstetricians and gynaecologists. Episiotomy. Practice Bulletin No: 71. obstet Gynecol. 2006;107(4):956−962.*
9. *Eko F, Vivian V, Fouelifack Y F. Sitz Bath Vs iodine antiseptic (betadine) imbibed gauze for the management of perineal and vaginal tears. International Journal of Translation Community Medicine. 2015;3(2):59−63.*
10. *http://en.wikipedia.org/wiki/Sitz_bath*
11. *Kaur S, Sheoron P. Comparison of Infra Red Light Therapy Vs Sitz bath on episiotomy in terms of wound healing and intensity of pain among postnatal mothers. International Journal of Nursing Care. 2014;2(1):37−41.*
12. *Amandeep, Sagar N. Effect of sitz bath in reduction of episiotomy pain and wound healing among postnatal mother. International Journal of Current Research. 2015;7(2):1241−1243.*
13. *George PG. A comparative study to assess the effectiveness of medicated and non-medicated sitz bath in episiotomy wound healing among postnatal mothers in selected hospital, Bangalore. Bangalore Rajiv Gandhi University of Health Science; 2013.*