

Medicated and Non-Medicated Sitz Baths for Episiotomy Wound Healing in Government Hospital Postnatal Moms, Gwalior”- A Quasi-Experimental Study

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ABSTRACT

Background

Each woman's experience of labour is unique, yet it is always a miraculous part of nature. For a woman, this may be a game changer. There is no other time in a woman's life when she will encounter such a unique collection of mental, emotional, and physiological hurdles as the first time she gives birth. Birth-related damage to the perineum or genital tract may complicate the postpartum period for new mothers. The episiotomy procedure involves making an incision in the perineum to increase the size of the vaginal opening during delivery and to protect the uterine lining from trauma.

Objective- Episiotomy wound healing was studied using a comparison of medicated and unmedicated sitz baths in a study done at the Gwalior Government Hospital. Quasi-experimental methodology and an assessment strategy were utilised in the research. Fifty participants were picked by a non-random process known as convenient sampling, yielding an overall sample size of fifteen. The information was compiled using the REEDA scale.

Results- The study found that postnatal mothers' levels of episiotomy wound healing differed significantly between the pre-and post-test periods.

Conclusion- This suggests that sitz baths, whether medicated or not, have a positive effect on episiotomy wound healing. The medicated sitz bath greatly outperformed the non-medicated sitz bath in terms of post-test healing scores, proving its superiority. Furthermore, there was no discernible correlation between the speed with which the episiotomy wound healed and other sociodemographic variables.

Introduction

Labor is defined as "a series of events that take place in the genital organs to expel the viable products of conception out of the womb through the vagina into the outer world." The first stage of labour typically lasts 12 hours in first-time mothers and 6 hours in repeat mothers. It takes two hours for first-time mothers to enter the second stage, but only thirty minutes for experienced mothers carrying multiple babies. Both single and multiple pregnancies have a

third stage that lasts for 15 minutes. In both multipara and primigravida pregnancies, the fourth stage consists of at least an hour of observation for both mother and child.¹

The process of giving birth is something that must be experienced by every woman who has carried a pregnancy to term. It is possible to have a normal delivery or one assisted by forceps, vacuum, or a caesarean section. After the baby has been delivered vaginally, the health care provider or midwife will perform an episiotomy. This is the standard method of childbirth.^[2]

WHO recommends 10% episiotomy for normal deliveries.^[3] 30% to 50% of women still have episiotomies, despite their decreasing frequency.⁴ Episiotomy rates range from 8% to 99% in Eastern Europe, Asian skin doesn't stretch as well as Caucasian skin, so Asian women may need an episiotomy.^[5] Perineal trauma occurs in 40% of first-time mothers and 20% of subsequent pregnancies [6]

A surgical incision called an episiotomy is possible for the foetus to be delivered without putting undue pressure on the mother or the perineum. As the name implies, an episiotomy cuts down on the second stage of labour. The first episiotomy was performed using a perineal incision in 1742. [7]

Due to the higher risk of anal sphincter and rectum damage associated with a median (midline) incision, a mediolateral incision may be preferred when an episiotomy is necessary. [8] Complications include unfavourable anatomical outcomes, excessive blood loss, perineal discomfort, and dyspareunia. Uses for the perineal muscles include: (sitting, walking, squatting, bending, urinating, and defecating). Extreme discomfort follows incisions made in this region. [9]

Bath is mostly used for analgesic purposes. The phrase "sitz bath" originates from the German word Sitzbad, which literally means "sitting bath" (Bad) (sitzen). A sitz bath may be taken in either hot or cold water. A soothing hot bath may help relieve itching, soreness, and other symptoms. If you fill your standard bathtub to a depth of 3 to 4 inches (7.6 to 10.2cm), you'll have enough hot water to soak in for 15 to 20 minutes at a pleasant 110 degrees Fahrenheit (43 degrees Celsius). [10] If you suffer from pelvic pain, a sitz bath is an easy and very efficient way to relieve your symptoms. [11]

Postpartum moms in Gwalior were studied in a quasi-experimental comparison of medicated and non-medicated sitz baths for episiotomy wound healing. Fifty postpartum women who had an episiotomy were surveyed (25 in each medicated group and 25 in the non-medicated group). Both groups received standard care, but the medicated group also had a sitz bath. Numerical pain rating scales and the REEDA Scale were used to evaluate wound healing. Episiotomy discomfort was reduced and wound healing was accelerated by sitz baths (p=0.05). [12]

OBJECTIVES OF THE STUDY

1. To an episiotomy check before and after the sitz bath.
2. Examining the difference between medicated and non-medicated sitz baths on episiotomy wound healing.

3. To evaluate the relative merits of medicated and unmedicated sitz baths.

4. To link the demographic factor with sitz bath's efficiency in helping moms with episiotomy wounds recover.

HYPOTHESES

H1: Episiotomy recovery will be drastically different with a medicated sitz bath compared to one without.

H2: Various demographic factors will be significantly linked to the rate at which an episiotomy wound heals.

Materials & methods

A quasi-experimental approach with before and after test groups was employed in this investigation. Gwalior government hospital was the research site. 50 postnatal mothers with episiotomy (25 medicated, 25 non-medicated) were sampled. The sample was selected using a convenient method. Before collecting data, authorities gave written permission. Socio-demographic profile was a tool. Episiotomy wound healing is evaluated both before and after the procedure using demographic variables such as the mother's age, religion, education level, gravidity, gestational age, newborn weight, and the kind and length of the incision. The intensity of each symptom was used to provide a score from 0 to 3 to each item. Our utmost number was 15. No longer injured (0), somewhat injured (1-5), injured but recovering (6-10) or completely injured (11) (11-15).

The collection of data took place between the dates of 24 August 2021 and 23 September 2021. Before administering the questionnaire to the postnatal mothers and conducting interviews with them, the investigator introduced themselves to the subjects and discussed the reason for collecting this information. It was successful in developing a strong rapport with the subjects. Subjects' consent was obtained in a formally documented manner. The filling out of the instrument typically took each respondent between 20 and 30 minutes of their time on average. Analyses and calculations using percentages, means, standard deviations, and the t-test were performed on the data that was gathered.

Results

TABLE-1: The average, median, and standard deviation for mothers' wound healing ratings after an episiotomy. N= 50 (E= 25, C= 25)

Group	No. of Items	Max Score	First Day/pre-test			Third day/Post-test		
			Mean	Mean %	SD	Mean	Mean %	SD
Medicated Sitz bath	5	15	10.88	72.53	2.386	5.68	37.86	3.375
Non-medicated Sitz bath	5	15	10.68	71.2	2.466	8.0	53.33	2.550

Both the medicated and non-medicated groups had similar pre-test results for episiotomy wound healing, with means of 10.88 (72.53%) and a standard deviation of 2.386 (SD = 2.466), respectively. The post-test scores for episiotomy wound healing were 5.68 (37.86%), SD = 3.375, in the medicated group, and 8.0 (53.33%), SD = 2.55, in the non-medicated group, showing quicker healing in the medicated group.

TABLE 2: Evaluation of episiotomy wound healing time in new moms N= 50 (E= 25, C= 25) before and after giving birth.

Group	First Day/pre-test		Third day/Post-test		Mean difference	t Value	Inference
	Mean	SD	Mean	SD			
Sitz bath with medication	10.28	2.26	5.55	3.255	4.9	7.999	S
Sitz bath with Non medication	10.48	2.44	7.98	2.333	2.44	4.444	S
Difference in Mean	0.02		2.23				
Value of t	0.488		3.616				
Implication	NS		NS				

The resultant "t" values of 8.826 and 4.654 are statistically significant above the table value of 0.05, as shown in table 2. Accordingly, the significance of the t-value is established. It indicates that postnatal women in both groups are making progress in terms of episiotomy wound healing. However, there is a statistically significant difference between the two groups, as shown by the independent t-test, which compared the post-test scores of the medicated and non-medicated groups and yielded a t-value of 3.717.

Episiotomy wound healing ratings of postnatal mothers in the medicated sitz bath group were correlated with a number of sociodemographic factors, and the 2 value between the two was calculated. Birth outcomes were not significantly different from the general population after controlling for age, religion, education, gravida, gestational age, birth weight, or the kind and length of episiotomy. Therefore, it can be concluded that the postnatal mothers' wound healing ratings after an episiotomy are not significantly related to the factors used for this analysis. Accordingly, we cannot confirm the prediction that there would be a substantial correlation between postpartum mothers' ratings of their episiotomy wounds' healing and certain sociodemographic factors.

In a similar vein, the 2 value was determined between pre-test episiotomy wound healing scores and certain demographic characteristics among Postnatal moms in the non-medicated sitz bath group. The effects of age, religion, education, gravida, gestational age, birth weight, and episiotomy type were not statistically significant at the 0.05 level. Therefore, it may be concluded that the postnatal mothers' wound healing ratings after an episiotomy are not

significantly correlated with the factors studied. Therefore, we cannot confirm the hypothesis that there is going to be a strong correlation between postpartum mothers' wound healing ratings after an episiotomy and certain sociodemographic factors.

Discussion

In the unmedicated group, the mean pre-test score was 10.88 (SD = 2.386), but in the medicated group, it was 5.68 (SD = 3.375) on day 3. The non-medicated group had a mean pre-test score of 10.68, with a standard deviation of 2.466, while the medicated group had a mean pre-test score of 8.0, with a standard deviation of 2.55, for episiotomy wound healing. The moms who underwent their episiotomies after giving birth fared differently in the control group. Medicated sitz baths aid in the healing of episiotomy wounds in new moms, according to the study. In a similar vein, researchers looked at how olive oil sitz baths affected perineal damage in the postpartum period. Differences between the study and control groups were seen in pain intensity 5 and 10 days after birth (p0.05), wound redness 5 days after delivery (p0.0001), and redness (p0.000), oedema (p0.05). A sitz bath with olive oil helps reduce perineal irritation after childbirth. 5

In a related study, researchers in Bangalore examined the effectiveness of medicated and unmedicated sitz baths for new moms. When referring to the medicated group, 1 day equals 5. On day 5, this value drops to 0.64. When compared to the medicated group, the non-medicated group had a mean of 5.04 on day 1 and a mean of 4.16 on day 5. The medicated group had a mean percentage of 33.3 on day 1 and a mean percentage of 4.2 on day 5, whereas the unmedicated group has a difference of 27.73 between these two numbers. Third (7.76), fourth (6.54), and fifth (5.89) days (7.17). Episiotomy incisions tend to mend more quickly when given medication. 13

Healing scores for episiotomies were significantly higher in the medicated group (mean score of 5.2 vs. 2.68; t values of 8.826 and 4.654, respectively; p0.01) than in the non-medicated group. There was no discernible change between the experimental and control groups after the event. Similar research was conducted in Bangalore comparing medicated and unmedicated sitz baths for new moms.

Conclusion

In the medicated group, day 1 means 10.88 and day 3 means 5.68. Non-medicated group day 1 mean 10.68, day 5 mean 8.0. The mean percentage in the medicated group is 72.53 on day 1 and 37.86 on day 3, while in the non-medicated group it's 71.2 and 53.33.

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Conflict of interest

Nil

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