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A STUDY TO ASSESS THE EFFECTIVENESS OF SITZ BATH ON LEVEL OF PAIN AMONG POSTNATAL MOTHERS WITH EPISIOTOMY WOUND IN A SELECTED HOSPITAL AT TUMKUR KARNATAKA

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Abstract

Background: Giving birth is one of the great honours which god gave to woman, for this woman is respected everywhere. Puerperium is a period when great changes take place in a woman's physical and mental setup that may pose a challenge to postnatal women in various ways. An episiotomy is the surgical incision made to enlarge the vaginal opening for delivery of the baby's head. The concern of health personnel during this period should be to provide comfort to her, help her in relieving pain and to prevent infection. Enhancing healing of episiotomy wound is one of the major concerns after a normal delivery. **Objectives:** To assess the effectiveness of sitz bath in episiotomy wound pain among postpartum mothers. **Participants and setting:** 30 postnatal mothers who fulfilled the inclusion criteria were selected (with 15 each in experimental group and 15 for control group). **Design:** Quasi experimental design. **Materials and Methods:** post natal mothers were selected by using non-probability purposive sampling technique. The pre-test level of pain was assessed using a visual analogue scale for both the groups. Sitz bath education was administered to the experimental group and the pre and post-test level of pain was assessed for both the group. **Results:** The result showed that in the experimental group, the pre

mean score of pain level was 4.40 with an S.D of 0.736 and the post-test score was 2.86 with an S.D of 0.743 ($t = 3.500$ at $df 14$ $*p < 0.001$), the control group pre mean score of pain level was 5.0 with an S.D. of 0.753 and the post mean score of pain level was 4.53 with an S.D. of 0.51640. In results shows that Control group and experimental group having paired mean value difference is 1.6667, in the t value is 7.123 at $p < 0.001$. This suggests that the effectiveness of sitz bath on level of pain among postnatal mothers with episiotomy wound had a stronger impact in the experimental group than the control group. There was significant association between experimental group posttest levels of pain with demographic variables are age and status of pregnancy. **Conclusion:** This study shows high statistical significance and the overall post-test level of pains in experimental group in comparison with the control group. **Conclusions:** The study concluded that the sitz bath was effective to reduce the episiotomy pain level for postnatal mothers.

Keywords: Sitz bath, visual analogue scale, post natal mothers, episiotomy wound.

INTRODUCTION

Giving birth is one of the great honours which god gave to woman, for this woman is respected everywhere. Puerperium is a period when great changes take place in a woman's physical and mental setup that may pose a challenge to postnatal women in various ways. This is true, especially when she experiences pain of episiotomy wound after a normal delivery. The concern of health personnel during this period should be to provide comfort to her, help her in relieving pain and to prevent infection. Enhancing healing of episiotomy wound is one of the major concerns after a normal delivery. A study was conducted to establish the prevalence of perineal pain, the effects of pain on postnatal recovery at Royal Woman's Hospital, Victoria in Australia. [1, 2] A sample consists of 215 postnatal women within 72 hours of vaginal birth. Structured interview method was used for data collection. The results of the study revealed that 90% of women reported some perineal pain, 37% reported moderate or severe pain. Over a third of women experienced moderate or severe perineal pain particularly when walking 33%, sitting 39%, while 45% noted that the pain interfered with sleep. Women reported moderate or severe perineal pain when they undertook activities involving feeding or caring their infants (12%). The researcher suggested that prevalence of perineal pain and the associated impact on women's recovery from childbirth warrants midwives' proactive care in offering a range of effective pain relief options to women.

Need for the study

Episiotomy was once the most frequently performed operation in obstetrics. In 1979, episiotomy was performed in 62.5% of all vaginal deliveries in the United States, and in nulliparous women, the episiotomy rate rose to 80%. Since that time, the routine use of episiotomy has been increasingly questioned. In 2004 the rate of episiotomy with all vaginal births was 24.5%. The use of episiotomy has been said to decrease trauma to the foetus, decrease the frequency of extensive perineal tears, and protect the maternal soft tissues. [8,9] A study on "Contribution of phototherapy to the treatment of Episiotomies" conducted by Jaroslava Kypkova demonstrated high healing effects by the use of phototherapy [10]. The WHO recommends an episiotomy rate of 10% for normal deliveries. Following delivery, patients who had episiotomy complaints of perineal pain more than those with an intact perineum or first or second degree tears. Episiotomy appears to be the cause of more perineal pain and dyspareunia during the early postpartum weeks. Pain often interferes with the basic activities of a woman such as walking, sitting and passing motion and urine and negatively impact on motherhood experiences. In Australia in 2005, the average rate of episiotomy was 15%. The rate of women who had no tears or small tears that may not require stitches was on average about 55%. On a worldwide level, Australia compares

quite well when it comes to performing episiotomies, considering that the episiotomy rate in the United States is currently around 35%. In India the overall rate of episiotomy was 40.6%. Among that midwives performed episiotomies at a lower rate (21.4%) than faculty (33.3%) and private providers. The episiotomy rate in Karnataka is very high. It is about 88% in women who are undergoing difficult labour. In Bangalore rates of episiotomy for vaginal birth range from 31% to 95% of the grand total of 3590 vaginal deliveries. Midwives have an important role to play in the care of perineal wound healing following childbirth. A wide variety of practices are carried out in this area. [4,5] Some current practices may not be beneficial to the promotion of wound healing. Midwives must realise the relevance of their care and potential impact, both positive and negative, of advocated treatments in wound healing. The maintenance of effective pain relief must be balanced with a need to promote wound healing. As a midwife the role of nurse in stress is provision of support in physical, emotional and psychological problems by considering culture and beliefs of the clients [6,7]. Provision of services to the patient for the reduction of pain and stress, helps the patient to cope with the stress and to alleviate the stress and pain. There are many reasons to feel pain during pregnancy. Coping with pain is very important. There are numerous studies which indicate that pregnancy can be pain and stressful time for expectant mother. Maternal pain and stress in pregnancy is associated with elevated blood pressure, excessive weight gain, weight loss, sleeplessness, fatigue.

Statement of Problem

"A study to determine the effects of sitz bath on level of pain among postnatal mothers in a district Hospitals in Tumkur, Karnataka"

Objective of the Study

1. To assess the level of pain among postnatal mothers in pre experimental group and pre control group by using Visual Analogue Scale (VAS).
2. To assess the level of pain among postnatal mothers in post experimental group and post control group by using Visual Analogue Scale (VAS).
3. To compare the level of pain between pre-test and post-test in experimental group and control group.
4. To determine the level of pain between experimental group and control group.
5. To find the association between post test score in experimental group and control group with some selected demographic variables.

Hypothesis:-

H₁: There will be significant difference in the level of pain among postnatal mothers in experimental group and control group.

H₂: There will be significant association between post-test score in experimental group with some selected demographic variables

METHODOLOGY

Research design: The research design used for this study is Quasi experimental research design, such as pretest and posttest with a comparison group design.

A quantitative approach was adopted with quasi experimental control group pre-test and post-test design. The independent variable was Sitz bath and the dependent variables were Episiotomy pain level. The study was conducted in selected government hospital at Tumkur, Karnataka. The study population included who had normal vaginal delivery with episiotomy. [11] The sample size consisted of 30 mothers (15 in study group and 15 in control group), who fulfilled the inclusion and exclusion criteria, and were selected by non-probability purposive sampling technique. The study included the mothers who underwent normal vaginal delivery with episiotomy, who are willing to participate and who were available at the time of the study, and who are admitted for 3 post natal days and the study excluded mothers who were perineal infection.

The tool consisted of two parts i.e., data collection tool and intervention tool. Part A - The data collection tool included two sections. Section A consisted of demographic variables and Section B consisted of pain level assessment using visual analogue scale.

TOOL

It consists of visual analog scale to assess intensity of episiotomy pain visual analog scale comprises of a 10 cm horizontal line with end points marked as “No Pain” and “Worst Possible Pain”

Reliability of the tool:

Reliability denotes the degree of consistency of the tool. After validation the tools were subjected to test for its reliability. The Structured interview schedule was used for the data collection and visual analog scale is used to assess the intensity of episiotomy pain. The reliability score obtained from cronbachs alpha, $r=0.93$, which showed that the tool was reliable for conducting the study.

Data collection procedure

After obtaining written permission from the Medical Superintendent and Nursing Superintendent, the investigator started the study in from 20th December 2016 to 21st January 2017 from government hospital, Tumkur. On the first day of data collection, the investigator introduced her and explained the nature and purpose of the study to the sitz bath for episiotomy mothers. Consent was obtained to participate in the study and confidentiality of their responses was assured. As the part of the study, a pretest was conducted to the group of episiotomy mothers here one group used sitz bath that is experimental group

and another group is an control group it is not used sitz bath. After pretest, on the seventh day, a post test was conducted with the copy of same structured visual analog scale was used in the same manner of pretest was conducted. The same procedure was followed for the data collection for the rest of the samples subsequently.

Ethical considerations

Ethical approval was obtained from the Institutional Ethics Review Board. Formal permission was obtained from the Principal .The researcher had fully described the nature of the study, its purposes and steps involved; based on this oral and written informed consent was obtained from the samples.

RESULTS AND DISCUSSION

Section A: Distribution of Demographic variables

The age wise distribution of age for the 30 members. in experimental group out of 15 members, 8(53%) of them belongs to age group between 20 to 30 years, 6 (40%) were 31 to 40 years of age, 1 (7%) were 41 to 50 years, in control group out of 15 members, 11(73%) of them belongs to age group between 20 to 30 years, 4 (27%) of them belongs to age group between 31 to 40 years of age. The distribution of religion for the 30 members in experimental group out of 15 members, 7(47%) of them belongs to Hindu, 5(33%) were Christian, 3 (20%) were Muslims .in control group out of 15 members, 7(47%) of belongs to Hindu, 6 (40%) were Christian, 2(13%) were Muslims.

Section B: comparison between pretest and posttest between experimental and control group

The pretest in control group having mean value is 5, standard deviation is .75593 and standard error mean is .19518. In the pretest in experimental group having mean value is 4.4000, standard deviation is .73679 and standard error mean is 0.19024. That in the post test in control group having mean value is 4.5333, standard deviation is 0.51640 and standard error mean is .13333. In the post test in experimental group having mean value is 2.8667, standard deviation is .74322 and standard error mean is .19190.

Comparison between pretest and posttest in experimental group

In the pretest, experimental group having mean value is 4.4000, standard deviation is .073679 and standard error mean is 0.19024.

In the post test experimental group having mean value is 2.8667, standard deviation is .74322 and standard error mean is 0.19190. Experimental group having paired mean value is 1.5333, standard deviation is .7432 and standard error mean is .7432. In the t value is 7.990 at df 14 * $p<0.001$.

Control group having paired mean value is .46667, standard deviation is .51640 and standard error

mean is .13333. In the t value is 3.500 at df 14 * $p < 0.001$. Comparing the experimental group's t- value of 7.990 to the control groups t- value of 3.500, its evident that the experimental group experienced a larger and more significant effect from the sitz bath education compared to the control group. [5] Results showed that the sitz bath education was very effective method to decrease episiotomy wound pain than the mothers who got routine postnatal care in the control group.

Section c: Association of Demographic variables with Experimental and control group pain variables

In experimental group there was no significant association between level of pain with demographic variables such as religion, type of family, education,

occupation, and family income, source of information, residential area and nutritional status. But there was significant association between levels of pain with demographic variables is age and status of pregnancy. In control group there was no significant association between level of pain with demographic variables such as age, status of pregnancy, religion, type of family, education, occupation, and family income, source of information, residential area and nutritional status. There is no single demographic variables has significant associated with level of pain in control group. Results showed that the sitz bath education was very effective method to decrease episiotomy wound pain than the mothers who got routine postnatal care in the control group.

Table 1: Paired Samples Test for experimental group

Description	Paired Differences					t	Df
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower	Upper		
pre - post	1.5333	.7432	.1910	1.1218	1.9449	7.990*	14

* $p < 0.001$

experimental group having paired mean value is 1.5333, standard deviation is .7432 and standard error mean is .1910. In the t value is 7.990 at df 14 * $p < 0.001$.

Table 2: Paired Samples Test for control group

Description	Paired Differences					t	df
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower	Upper		
Pre - Post	.46667	.51640	.13333	.18070	.75264	3.500*	14

Figure 1: Pretest comparison between control group and experimental group (n=30)

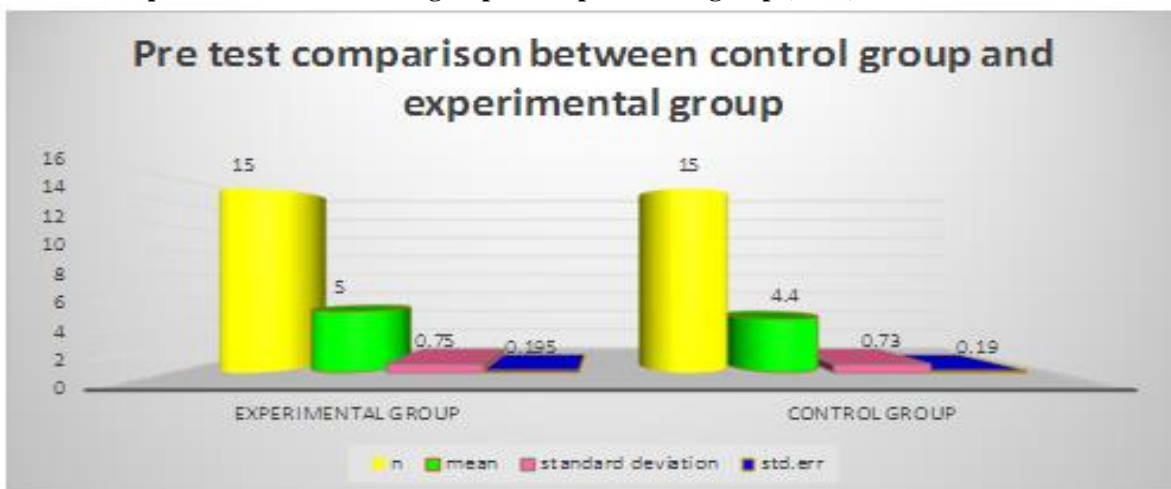
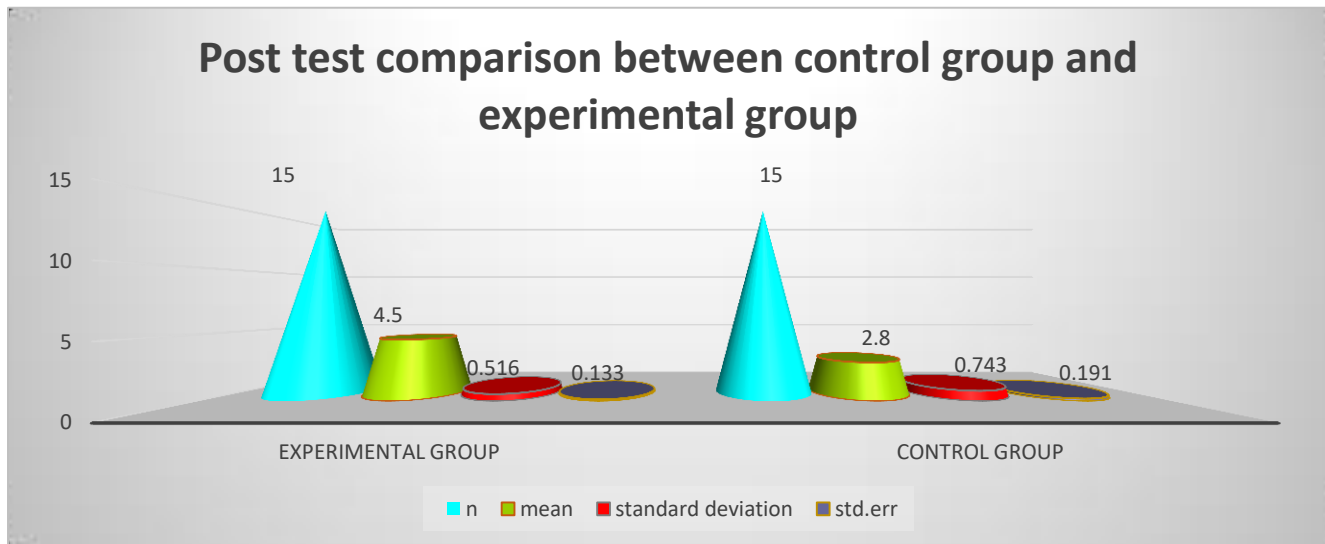
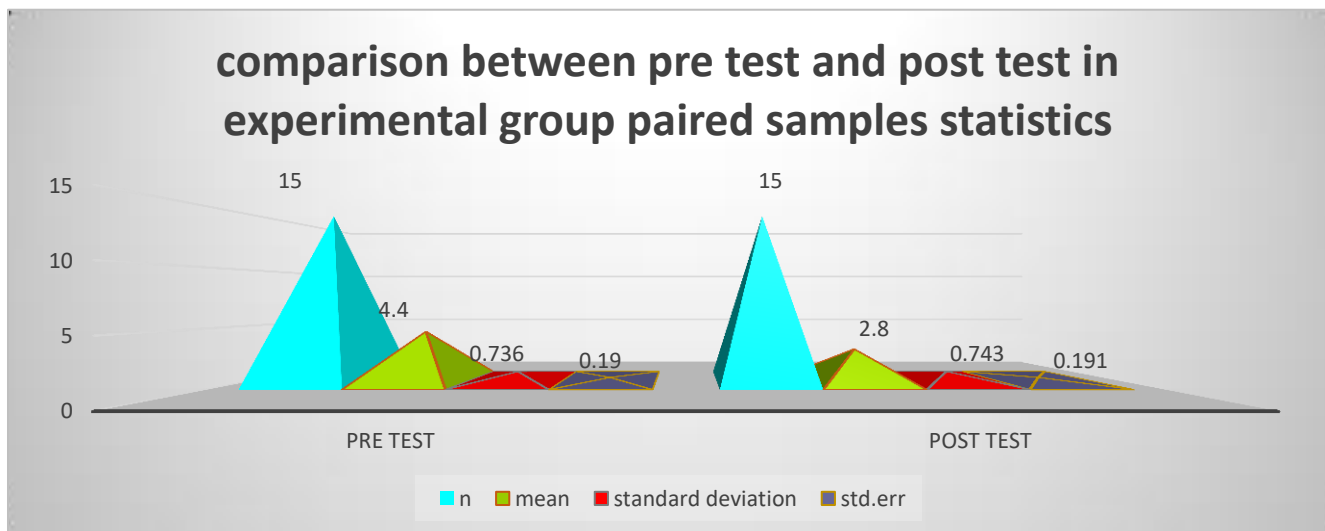


Figure 2: Posttest comparison between control group and experimental group (n=30)**Figure 3: Comparison between pretest and posttest in experimental group (n=30)****Limitations****The present study has following limitations**

The study has sampling constraints to 30 sizes (15 experimental and 15 controls). Due to time constraint a non-probability Sampling Technique was used. The study has design constraints in the form of threats to internal validity such as effect of history, maturation and instrumentation. Instrumentation and testing-refers to the effects by using Visual Analogue Scale (VAS) of taking a level of pain subject's performance. Study was conducted in only district hospital at Tumkur, Karnataka district. Hence generalization is possible only to the selected settings. The findings of the study support the need to conduct education and training regarding care of pain and sitz bath in participated members and their relatives, with regard to postnatal mothers. Thus the student researcher

recommends further studies in these areas to improve the quality of care on pain and sitz bath among postnatal mothers.

CONCLUSION

The present study was aimed to assess the effectiveness of Sitz bath among post natal mother who had undergone episiotomy. The findings revealed that there was significant decrease of pain among experimental mother than in control group mother.

Source of support

None

Conflict of interests

None declared

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Contributors DK

Conceptualization of the study, collection, analysis

of the data, writing the manuscript, finalized the manuscript and will act as the guarantor of the paper; RRP: Conceptualization of the study, analysis of the data, writing the manuscript, finalized the manuscript, edited and critically evaluated the manuscript; KS, CD: Edited and critically evaluated the manuscript.

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