

## A study to assess the effectiveness of infrared light therapy on episiotomy wound healing among post natal mothers with episiotomy in Narayana general Hospital at Nellore.



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### INTRODUCTION(BACK GROUND OF THE STUDY)

Motherhood is the only act that manifests in human form the cosmic wonder of creation. Imagine a life growing within the body of the mother, nurtured with her life blood, And then there is the greatest wonder of all, this vague motion within her womb blooms into tiny human being reaching out. Most of all normal vaginal deliveries will be conducted with the help of an episiotomy. **Suramanjary (2007)** states that until 20<sup>th</sup> century the routine use of episiotomy was believed to have multiple benefits for both mothers and infant. **D.C Dutta (2004)** A surgically planned incision on the perineum and the posterior vaginal wall during the second stage of labour it is called episiotomy. An incision is begun at the posterior fourchette and continued downward at an angle of at least 45° relative to the perineal body either right or left and is generally 3 - 4 cm in length.

**RinaBhowal (2010)** Infrared light therapy is a very powerful new technology that relieves pain is probably due to the sedative effect on the superficial sensory nerve endings.

Scientists believe that the mechanism of action of photonic stimulation is related to its ability to excite electrons within the energy producing mitochondria of cells in injured tissues. This process is thought to enable these cells to increase their production of ATP, the energy currency of our cells, and thereby stimulating the return of more normal cellular physiology. Accompanying this is a more normal regulation of the autonomic nervous system that increases blood flow to injured tissues - this promotes both pain relief and faster healing. So, infrared

therapy is necessary to promote episiotomy wound healing, In many settings the research had undergone, The researcher had intention to do this study in Nellore district, to promote quick episiotomy wound healing on postnatal mothers who had undergone episiotomy.

### OBJECTIVES

- To assess the episiotomy wound among postnatal mothers with episiotomy.
- To assess the effectiveness of infrared light therapy on episiotomy wound healing among postnatal mother with episiotomy.
- To compare the effectiveness of infra red light therapy on episiotomy wound healing among experimental and control group.

### DETAILED RESEARCH PLAN (METHODOLOGY)

**Research approach:** A quantitative research approach was utilised for this research,

**Research Design:** pre and post-test design was adopted for this study

**Setting of the study :** postnatal ward of Narayana General Hospital had adopted for research, which has 12 bed strength.

**population of the study:** postnatal mothers with episiotomy had selected for the study.

**Sampling technique:** Probability sampling technique was used for the study.

**Sample method:** Simple random sampling method was utilised to select the sample in this study.

**Sample:** Postnatal mothers who have given normal vaginal birth with episiotomy

**Sample size:** 60,30 experimental group,30 control group.

**TOOL AND TECHNIQUE:** The tool is divided into two parts:

**Part-1:** It deals with socio demographic data including age, education, family income, religion, type of family, residence, and number of deliveries and source of health information.

**Part-2:** It deals with observational checklist for episiotomy wound healing assessment by using REEDA scale. It stands for R- Redness, E- Edema/oedema, E-Ecchymosis,

D- Discharge, A- Approximation

### SCORING KEY AND INTERPRETATIONS

According to length of the wound, the wound healing is classified.

Good healing-less than 2cm

Moderate healing-2.1 to 3cm

Poor healing-3.1 to 4cm

### DATA COLLECTION PROCEDURE

Formal permission was obtained from the Medical Superintendent, HOD of obstetrical and gynaecological ward, the Nursing Superintendent, and the ward in charge of the postnatal ward. The data was collected over a period of 6 weeks. The samples were informed by the investigator about the nature and purpose of the study. 60 postnatal mothers were selected by using simple random sampling technique. 30 postnatal mothers were assigned to experimental group and 30 postnatal mothers were to control group. Intervention was given to the experimental group by exposing infrared light therapy 230V, 45cm away from episiotomy wound for 15 minutes twice a day continuously for 3 days. After intervention the post test was conducted for both experimental and control group by using REEDA scale.

### MAJOR FINDING OF THE STUDY

Total 60 sample, in that 30 in experimental, 30 in control group. In experimental group, the mean pre-test score was 5.1, post-test 13.2 and standard deviation for pre-test is 1.4, post-test score is 1.97. In control group 5.4 in pre-test and 4.7 in post-test standard deviation pre-test 1.93 and post-test 1.4. Independent t test value was 9.1 which is significant at  $p=0.05$  level.

*Effectiveness of infra red light therapy on episiotomy wound healing among post natal mothers with episiotomy among experimental group:*

Test	Mean	Sd	Independent 'T' Test	Remarks
PRE TEST	5.1	1.4	9.1	Significant at $p=0.05$ level
POST TEST	13.2	1.97		

### RECOMMENDATIONS

The present study can be done with large sample size  
The present study can be done to assess episiotomy wound pain

The present study can be done in other setting

### CONCLUSION

Before intervention in experimental group 25 mothers (83.3%) had poor healing and 5 mothers (16.7%) were in satisfactory healing. After intervention 2 mothers (6.7%) had satisfactory healing and 28 mothers (93.3%) had good healing. Finally it concludes the infrared light therapy is very effective on episiotomy wound healing.

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