IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

"A Quasi Experimental Study To Assess The Effectiveness Of Early Ambulation In Post Operative Recovery Among Women With Cesarean Section Delivery Admitted In Selected Hospital Of Ayodhya."

Anjali Shukla[1], Dr. Nitin Chicholkar[2]

[1] *Index Nursing College, Malwanchal University, Indore, MP, India*

[2] *Professor, Index Nursing College, Malwanchal University, Indore, MP, India.*

ABSTRACT:

Cesarean section (CS) is a surgical procedure, the period after which can be more challenging. The present study was undertaken to assess the Effectiveness of Early Ambulation in Post Operative Recovery among Women with Cesarean Section Delivery.

AIM OF THE STUDY-

The aim of the study is to enhance the postoperative recovery in women with CS delivery.

METHODOLOGY-

Quasi experimental research design was used. The study was conducted on conveniently selected 60 samples of CS women admitted in Cloud Nine hospital Lucknow. Data was collected by Socio-demographic variables. Numerical pain rating scale to assess pain level and checklist for maternal outcome was used to collect the data and it was analyzed by descriptive and inferential statistics. Tables and bar diagrams were used to depict the findings.

RESULTS-

The result of the study showed that the pretest mean maternal outcome and pain level in experimental group was 2.50 and 8.40 whereas in control group it was 2.47 and 8.53 respectively. The mean post test maternal outcome on 2nd, 3rd, 4th and 5th day in experimental group was 9.40, 11.43, 13.50 and 14.73 whereas in control group it was 3.27, 6.63, 8.03 and 9.03 respectively. The t value on 4 days was 17.484, 8.843, 10.576 and 10.532 respectively. The mean pain level in experimental group on 2nd, 3rd, 4th and 5th day was 7.33, 6.50, 5.17 and 3.77 whereas in control group it was 7.87, 7.37, 6.57 and 5.90 respectively. The t value on 4 days was 2.138, 2.913, 4.164, 6.354 respectively. On all the 4 days the tabulated t value was more than the calculated **"t"** value. There is a significant difference in the maternal outcome and pain level between both the groups. There was no association between post operative recovery and socio demographic variables. Thus, it can be concluded that early ambulation has a significant impact on post operative recovery among women with CS delivery.

KEYWORDS: Early ambulation, Cesarean section delivery, post operative recovery, maternal outcome, pain level.

INTRODUCTION

''Whether your pregnancy was meticulously planned, medically coaxed, or happened by surprise, one thing is certain- your life will never be the same.''

Catherine Jones

Pregnancy is the most beautiful phase in a women life. It brings about emotional and physiological changes as well as poses extra demand on the body. Having a baby is a wonderful thing; of course it is also an occasion of changing women life**.** Pregnancy comes with some cost, however, for pregnant women needs also to be responsible women so as to best support the health of her future child. Women should know that pregnancy means carriage of one or more offspring known as fetus or embryo which is present inside the uterus of the female.

Babies can enter this world in one of two ways: Pregnant women can have either a vaginal birth or a surgical delivery by cesarean section. In some cases, cesarean section is planned because of medical reasons that make a vaginal birth risky. Cesarean section is preferred if the pregnant women is expecting twins or other multiples, or because of gestational diabetes mellitus, pregnancy induced hypertension or mothers may experience problems with the placenta during pregnancy. A cesarean section may also be necessary in certain situations such as delivering a large baby in a mother with small pelvis.

The period after caesarean section can be even more challenging. After any delivery, a mother needs to allow her body to rest and heal. This means little to no housework and no running after other little things. If there are no complications, after several hours mother will be wheeled from the post-operative area to a room in the postpartum recovery unit. Then mother is switched to a liquid diet (think broth and juice) and then eat real food, massage your uterus is done to encourage to contract and shrink it to its normal size. After 1day mother will be encouraged to get out of your bed but if possible, on the same day because the activity will speed up the Caesarean-section recovery. On 2nd day catheter is removed.

Mothers who have cesareans are less likely to breastfeed. Women who have had a cesarean have to focus on their own recovery; they may have difficulty focusing on the baby. The anesthesia can make some women nauseated. Women who have had a cesarean lose more blood than women who deliver vaginally. She can't roll over, sit up or get out of bed without help and will be afraid to cough or laugh. Infections are more common in mothers with Caesarean-sections compared to women with vaginal deliveries.

In case of cesarean section there are more chances of complications following childbirth than in vaginal delivery. The recovery time is longer after cesarean section. There can be hemorrhage (bleeding), wound infection, and injury to surrounding organs such as ureters, bladder and bowel, uterine injury**,** uterine atony. Risk of developing blood clots in veins, such as deep vein thrombosis with its more dangerous sequel of pulmonary embolism, which can be life-threatening. Early ambulation after surgery can help to prevent this complication.

Early walking after surgery is one of the crucial things you can do to prevent problems. Walking promotes the flow of oxygen throughout the body and maintains normal breathing function. It also strengthens muscle tone. Gastrointestinal and urinary tract functions are improved by walking. These body systems are slowed down after surgery. Walking also improves blood flow and speeds wound healing. Failure to walk may cause increased constipation and gas, pain, weakness, less power to fight infections and put you at a high risk to blood clots and lung problems such as pneumonia.

REVIEW OF LITERATURE

(Polite D.F. & Beck, C.T. 2011) Review of literature is an important step in the course of a research study. The review of literature is the systematic review of literatures relevant to the field of study.

Kaur H, Kaur S, Sikka P (2015) conducted a quasi-experimental study to assess the effect of early ambulation on post operative recovery among mothers with caesarean section delivery at Nehru Hospital, PGIMER Chandigarh. Total 80 subjects were taken in which 40 belonged to control group and 40 belonged to experimental group. Subjects in experimental group were early ambulated at 6 hours of caesarean section covering distance of 40 meters where as control group were ambulated as per routine care. Pain score was assessed with numerical pain rating scale. Results showed that

there was significant difference between mean post operative pain score after ambulation among experimental and control group as shown by Independent t-test($p<0.05$). This difference was statistically significant in all the variables except duration of catheterization as per the independent t-test ($p<0.05$). So it was concluded that early ambulation was effective in postoperative recovery among post cesarean mothers.

OBJECTIVES

1. To assess the post operative recovery among women with caesarean section delivery in experimental group and control group before early ambulation

2. To re-assess the post operative recovery with early ambulation in experimental group and without early ambulation in control group.

3. To compare the effectiveness of early ambulation in post operative recovery among women with caesarean section delivery in experimental group and control group.

4. To find out the association between post operative recovery among women with caesarean section delivery in experimental and control group with their selected socio demographic variables.

HYPOTHESIS

H_0- The post test mean scores of early ambulation in post operative recovery among women with cesarean section delivery in experimental group was not significantly higher than posttest mean score of early ambulation in post operative recovery in control group at ($p<0.05$) level of significance.

H_1-The post test mean scores of early ambulation in post operative recovery among women with cesarean section delivery in experimental group was significantly higher than posttest mean score of early ambulation in post operative recovery in control group at ($p<0.05$) level of significance.

MATERIAL AND METHODS

Sample criteria:

1. Inclusion criteria:

a.) All women with cesarean section delivery who are going to complete 24 hours of surgery.
b.) Women who are willing to participate in the study.
c.) Women who are able to understand English or Hindi.

2. Exclusion criteria:

a) Women with medical or obstetric complications who are restricted to walk.

VARIABLES

Independent variable:
Early ambulation

Dependent variable:
Post operative recovery

Tool and method of data collection:
Part-A: Socio Demographic Variable
Part-B: Numerical Pain Rating Scale.
Part-C: Checklist on maternal outcome.

RESEARCH METHODOLOGY

Research Approach	**Quantitative Approach**
Research Design	Non- randomized control group design.
Research Setting	Cloud nine Hospital, Lucknow.
Population	All post cesarean women of Lucknow
Target population	Post caesarean women of hospital
Sample Size	The sample size was 60 in both groups.
Sample Technique	Convenient sampling

Selection and Development of tool:
The tool was developed by referring books, article, journal, websites, and guidance of supervisor, co-supervisor and experts. Numerical pain rating scale and Checklist related to maternal outcome was prepared for collection of data.

Description of the Tool:
The tool consists of following parts.

Part-A: Socio Demographic Variable:
This section consisted of 9 items for obtaining information about socio demographic variables such as Age, Education status, Occupation, Income per month (in rupees), Religion, Type of family, Residential area, Gravida, Time of operation.

Part–B: Numerical Pain Rating Scale:
This section consists 3 main components such as mild, moderate and severe pain. These 3 components are divided into 11 parts. No pain scores 0. Mild pain includes score between 1-3. Moderate pain includes score 4-6 and severe pain includes score of 7-10. Maximum score was 10 and minimum score was 0.

Part–C: Checklist:
This section consists of 16 items to assess the effectiveness of early ambulation on maternal outcome. The items are no analgesics used, vital signs, urine passed, move out of bed, passed flatus, passed stool, Initiation of breast feed after cesarean section, Catheter removed, self voided after catheter removed, diet, Breast feeding and holding baby independently, involution of uterus, progress in wound healing, negative Homan's sign, walked at the distance of 5 meters, walked at the distance of 40 meters.

Table: 1 Criterion measures to assess pain level

S. No	Level of Pain Score	Percentage
1.	No pain 0	0
2.	Mild pain 1-3	10-30%
3.	Moderate pain 4-6	40-60%
4.	Severe pain 7-10	70-100%

Maximum score: 10
Minimum score: 00

Table:2Criterion measures to assess maternal outcome.

S. No	Maternal o Outcome	Score	%age
1.	Good	11 – 16	69- 100%
2.	Average	6 - 10	37.5- 62.5%
3.	Poor	0 - 5	0- 31%

Maximum score: 16
Minimum score: 00

Pilot study:
The pilot study was conducted in the month of July 2024. It was conducted in Aastha maternity center. The study was conducted on 12 post operative mothers i.e. 6 in experimental group and 6 in control group.

Reliability of the Tool:
It is the degree of consistency or dependability with which an instrument measures the attributes. Reliability was established by the inter-rated method. The reliability of the tool was 0.8. Hence the tool was reliable.

Data Collection Procedure:
Data will be collected from women with cesarean section delivery admitted in selected hospitals of Lucknow by taking permission from the concerned authorities of selected hospitals. Written consent was taken from all the samples and procedure was explained to them. Initially the positions are changed on the bed and then the patients are taken out from the bed by the researcher. After that the patient is allowed to walk with the assistance of attendants. Data will be collected by using Numerical Pain Rating Scale and Checklist related to maternal outcome among women with cesarean section delivery at the every end of the day.

ETHICAL CONSIDERATION

1. Written permission was taken from Principal.
2. Ethical clearance was obtained from the ethical clearance committee.
3. Written permission was taken from the Medical Superintendent of Hospital.
4. Written Informed consent was taken from the women with cesarean section delivery.

5. Confidentiality and anonymity of each study samples was maintained throughout the study.

PLAN OF DATA ANALYSIS

The data analysis and interpretation was done according to the objectives of the study. Analysis was done by using descriptive and inferential statistics. Descriptive statistics used was Frequency, Percentages, Mean and S.D. Inferential statistics were calculated by using t-test and repeated ANOVA. Tables and Bar diagrams, were used to depict the findings.

Major findings:

- According to age, in experimental group maximum 15 (50%) women were in the age of 24 – 29years and in Control group, maximum 15 (50%) women were in the age of 24 – 29 years.
- According to education, in experimental group maximum 15 (50%) were primary educated and in control group 12 (40%) were having no formal education.
- According to occupation in experimental group maximum 24 (80%) were housewives and in control group maximum 24 (80%) were housewives.
- According to Monthly income in experimental group maximum 14 (47%) were having family income in between 5001 – 10, 000 and in control group maximum 16 (53%) having income between 5001 – 10, 001.
- According to religion, in experimental group maximum 15 (50%) were Hindu, and in control group maximum 17 (15%) were Hindu.
- According to family in experimental group maximum 18 (60%) were having Joint family and in control group maximum 22 (73%) having joint family.
- According to residential area in experimental group maximum 16 (53%) were from rural area and in control group maximum 16 (53%) were from rural area.
- According to Gravida in experimental group maximum 17 (57%) were multigravida and in control group maximum 18 (60%) were multigravida.
- According to Time of operation in experimental group maximum 17 (57%) were emergency cesarean section and in control group maximum 18 (60%) were emergency cesarean section.

I-As per Pretest:

According to findings of present study, the maximum women having mean pretest outcome was poor (100%) and maximum pain level was severe (100%) in experimental group. In control group, the maximum women having mean pretest outcome was poor (100%) and maximum pain level is (97%)

II-As per Posttest:

In experimental group, the maximum women having mean post test outcome was average (70%) on day 2, maximum having good (63%) on day 3, (93%) on day 4 and (97%) on day 5.

The maximum pain level was severe (67%) on day 2, severe (57%) on day 3, the maximum having moderate pain (70%) on day 4 and maximum having mild pain (60%) on day 5.

In control group the maximum women having mean pretest pain level was poor (93%) on day 2, maximum have average outcome (70%) on day 3, (63%) on day 4, and (60%) on day 5. The maximum pain level is severe (100%) on day 2, (83%) on day 3, maximum have moderate pain (67%) on day 4, (70%) on day 5th.

III-Comparison:

In between group comparison of pretest and post test outcome and pain level score in experimental group, the mean outcome score of pretest (day 1) is 2.50 and post test (day 2 to day 5) is 9.40, 11.43, 13.50 and 14.73. In control group the mean outcome score of pretest (day 1) is 2.47 and post test (day 2 – day 5) is 3.27, 6.63, 8.03 and 9.03. The "t" value of both the groups of pre test (day 1) is 0.154 which is statistically insignificant. The "t" test of both groups of post test (day 2 – day 5) is 17.484, 8.843, 10.576 and 10.532. The "t" value of pre test among control and experimental is found statistically non significant, which was less than table value at 5% level of significance. The "t" value of post test among control and experimental is found statistically significant, which was more than table value at 5% level of significance.

Within group analysis comparison of outcome from day 1 to day 5 with in experimental group the F test value is 429.67 the P value is 2.450. So, the

table value is <0.05. The results revealed that the F value is more and hence the result is significant. On the other side, in experimental group the comparison of pain level from day 1 to day 5 the F test value is 147.84 and P value is 2.450. So, the table value is <0.05 and hence the results proved that there is significant difference from day 1 to day 5 and there is effective reduction in pain level of women with cesarean section delivery among experimental group after early ambulation.

Within group comparison of outcome from day 1 to day 5 with in control group the F test value is 121.32 the P value is 2.450. So, the table value is <0.05 and hence the result is significant. In comparison of pain level from day 1 to day 5 with in control group the F test value is 147.84, the P value is 2.450. So, the table value is <0.05. The results shows that there is mild reduction in pain level from day 1 to day 5 and the result is significant.

IV-Association:

There was no significant relation of the socio-demographic variables with mean maternal outcome and pain level of women with cesarean section delivery in control and experimental group.

NURSING IMPLICATIONS

The present study emphasized regarding knowledge on selected aspects of Essential newborn care among postnatal mothers.

- **Nursing practice**
- **Nursing administration**
- **Nursing research**
- **Nursing education**

RECOMMENDATIONS

- The same study could be conducted on larger sample for better generalization.
- The study could be replicated in hospitals for vaginal delivery clients.
- A study needs to be carried out in the urban and rural areas to find out the difference in knowledge.

REFERENCES

1. Kaur H, Kaur S, Sikka P. Assess the Effectiveness of Early Ambulation in Post Operative Recovery among Post Cesarean Mothers. Journal of Obstetric and Gynecological of India [serial online]. 2015 Jan; 5 :1: 48.

2. Sukare Lata. Assess the effectiveness of preoperative teaching on leg exercise and early ambulation, on post operative recovery. Indian Journal of Surgical Nursing [serial online]. 2016 sep-dec.3:5: 75-83.

3. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? Indian J Community Med. 2008;33:77–80. [PMC free article] [PubMed] [Google Scholar]

4. Mudey AB, Keshwarni N, Mudey GA, Goyal RC. A cross-sectional study on the awareness regarding safe and hygienic practices amongst school going adolescent girls in the rural areas of Wardha District, India. Glob J Health Sci. 2010;2:225–31. [Google Scholar]

5. Bhatia JC, Cleland J. Self-reported symptoms of gynecological morbidity and their treatment in South India. Stud Fam Plann. 1995;26:203–16. [PubMed] [Google Scholar]

6. Bathija GV, Bant DD, Itagimath SR. Study on usage of woman hygiene kit among menstruating age group in field practice area of KIMS, Hubli. Int J Biomed Res. 2013;4:95–8. [Google Scholar]

7. Rajan Elizabeth, Nayak Savitha. Effectiveness of self instructional module on knowledge of post operative self care for mothers undergoing elective cesarean section. NUJHS [serial online]. 2014 dec. 4:2249-7110.

8. Kaur Nirmal conducted a study on early recovery after abdominal surgery in 2007. Vol.7.

9. Suvarna N.M, Jyoti A. Salunkhe. Assess the effectiveness of early ambulation. IJHSR [Serial online]. 2014; 4:12:230-239. Avilable from: www.scopemed.org.mno=174269

10. Kulkarni MV, Durge PM. Reproductive health morbidities among adolescent girls: Breaking the silence. Ethno Med. 2011;5:165–8. [Google Scholar]