



“A STUDY TO ASSESS THE EFFECTIVENESS OF EARLY AMBULATION ON SELECTED ASPECTS OF POST OPERATIVE RECOVERY AMONG POST CAESAREAN MOTHERS ADMITTED IN SELECTED HOSPITAL, LUCKNOW.”

Mrs. Ankita Lal , M.Sc (Nursing) , Assistant Professor

Jeevan Jyoti Institute of Nursing and Paramedical Sciences, Aligarh, U.P

ABSTRACT

Aims & objectives : Assess the effectiveness of early ambulation on selected aspects of post operative recovery among post caesarean mothers.

Methodology : The study was conducted using Quantitative Research Approach at Career Hospital, Lucknow. The samples were collected using non probability convenience sampling technique, and Quasi experimental non randomized control group design was used in this study. The conceptual framework utilized in this study was **Roy's Adaptation Model**. A total of 30 samples were selected to be a part of this study. Before conducting the study written consent was obtained from the participants keeping in mind of all the ethics, rules and regulations of the study. The tool used for data collection was a structured rating scale on post operative recovery. The tool used had 2 parts in it. The first part consisted of 8 demographic variable questions to obtain a baseline data of every individual participating in the study. And the other half of the tool contained 14 structured questions for assessment of selected aspects of postoperative recovery among post caesarean mothers. The data was collected by administering the tool to the samples after providing intervention of early ambulation for 3 consecutive days. The data was analysed using SPSS package. The researcher found that there was a significant improvement in post operative recovery among post caesarean mothers in experimental group after the administration of intervention as compared to post operative recovery among mothers in control group.

Result: The result revealed that the early ambulation on selected aspects of postoperative recovery was effective. The researcher observed that the finding of the study revealed that the early ambulation improve the activity of daily living also enhance the post operative recovery after caesarean section and also improve the wellbeing of mother as well as newborn in the experimental group as compared to the control group. The mean of experimental group i.e. 25.13 was more than the mean of control group i.e. 19.53. Standard deviation shows the value of 2.03 in the experimental group and 2.55 in the control group.

Discussion: The study concluded that there was an effective postoperative recovery among post caesarean mothers in experimental group after the implication of early ambulation as a planned intervention. Thus the early ambulation is an effective approach to promote early postoperative recovery among post caesarean mothers.

Keywords: Early ambulation, Post operative recovery, Post caesarean mothers, Effectiveness

INTRODUCTION:

*"The Lord will sustain him upon his sickbed; In his illness, You restore him to health."
- Psalm 41:3*

In philosophy, the woman symbolizes the mother's natural feminine characteristics in the universe. Childbirth is considered a vital aspect of life when a natural, and normal physiologic event brings a newly experience in a woman's life and also the emergence of a baby creates a great emotional, physiological and social impact on a woman and her family.

International healthcare community has considered the ideal rate for caesarean sections to be between 10% and 15%. Caesarean sections have become increasingly common in both developed and developing countries. When medically justified, a caesarean section can effectively prevent maternal and perinatal mortality and morbidity

In India out of 22,111 live birth analysed 49.2% were delivered at public sector, 31.9% at private sector and 18.9% were home deliveries. Prevalence of CS births in India recently is 13.7% in private sectors and 37.9% in public sectors, respectively. Higher order of CS births were observed in public health facility. Group of women who are having more CS births are mostly urban residence, elderly primigravida, hypertensive mothers and mothers with breech complications.

NEED FOR THE STUDY:

In India, the Caesarean Section rate has been increased from 2.9 percent of childbirth in 1992-93 to 7.1 percent during 1998-99 and further rise to 8.5 percent in 2005-2006 and a steady rise to 17.2 percent in 2015-2016. So, we can say that there is an unprecedented level of rising in Caesarean Section rates which will ultimately lead to more complications. So, to avoid complication the midwives must be tactful in providing care during the postoperative period. Midwives can play a important role in assisting mothers after caesarean section for ambulation and early recovery. It will promote a good maternal health and prevent long hospital stay of mother.

Early ambulation is a key factor in helping the patient to re-establish the normal physiology and preventing or minimizing postoperative complications. Ambulation hastens muscle redevelopment and wound healing. Besides the positive effects of prevention of venous thrombosis, some other beneficial effects of early ambulation are more rapid involution of the uterus and genitals, less incidences of puerperal infection, less incidences of pneumonia and other respiratory complications, less blood in the lochia and a better state of mind.

OBJECTIVES OF THE STUDY:

- To assess the effect of early ambulation on selected aspects of post operative recovery among post caesarean mothers in experimental and control group.
- To compare the post interventional postoperative recovery among experimental group and control group.
- To find out association between selected aspects of post operative recovery among post caesarean mothers in experimental group with selected demographic variables.

OPERATIONAL DEFINITION

- **Assess** : In this study it refers to evaluating the postoperative recovery of women undergone caesarean section in experimental group and control group.
- **Effectiveness** : In this study it refers to determining the extent to which the intervention has achieved the desired research outcome changes in postoperative recovery.
- **Early ambulation** : In this study early ambulation means mobilization of post LSCS mothers on first post operative day (i.e. 20 hrs after caesarean section). Subject will be instructed first to take upright position and move in bed followed by walking at a distance of 40 meters for 10-15 minutes for 3 times a day with an interval of 3-4 hrs. for 3 days.
- **Postoperative recovery** : In this study postoperative recovery means performance of activities of daily living and process of returning to normality and wholeness after caesarean section. Selected activities included in this study for assessing postoperative recovery are removal of urinary catheter, self void , breast feeding and holding baby independently, passed flatus, analgesics required, bowel elimination, changing clothes, moving in & out of bed, bathing, diet, combing hairs, care of baby independently, presence of homan's sign and maternal feeling of well being.
- **Caesarean section**: In this study caesarean section refers to the operative procedure where by the fetus is delivered through an incision on the abdominal and uterine walls when the vaginal delivery is contraindicated.

HYPOTHESIS:

H1 - There is statistically significant differences on selected aspects of postoperative recovery among post caesarean mothers in experimental group and control group.

H2 – There is statistically significant association between selected aspects of postoperative recovery among post caesarean mothers in experimental group and selected socio demographic variables at p value <0.05.

REVIEW OF LITERATURE:

Literature related to early ambulation and its effectiveness on selected aspects of post operative recovery

A study was done in 2018, to assess the effectiveness of early ambulation on postoperative recovery among women with caesarean section in Himalayan Hospital, Dehradun. The study was done on group of 60 women selected with convenient sampling technique. The present study finding shows effective post operative recovery score (activity daily living) among experimental group. Experimental group showed gradual improvement in the post operative recovery from day-I- 23.77 ± 2.763 , day-II- 35.37 ± 2.498 and day-III- 45.67 ± 2.564 .

Literature related to effectiveness of early ambulation on LSCS

A study was conducted in 2017, to assess the impact of early and late ambulation on maternal outcome of mothers with caesarean birth in Father Muller Medical College and Hospital in Mangalore. Purposive sampling technique was used to select 50 samples in each experimental and control group. The mean breast feeding, rooming in and maternal feelings of wellbeing scores in group I (14) was higher than the mean breast feeding, rooming in and maternal feelings of wellbeing scores in group II (8.44) on the second postnatal day. The mean lochia scores in group I (268) was lower than the mean lochia scores in group II (248) on the second postnatal day. The computed 't' value showed a significant difference in the maternal outcome of mothers with caesarean birth in group I and group II.

DATA ANALYSIS AND INTERPRETATION: Analysis is the examination and evaluation of relevant information to select the best course of action from various alternatives systematic investigation to establish facts or principles and to collect information on a subject , to carry out investigation into particular sequence. Analysis is the process of carefully scrutinizing the data by placing it in categories and applying the statistical procedures.

The analyzed data was organized according to objectives and presented under the following major headings:

- **Section I :** Sample Characteristics
- **Section II :** Objective wise analysis

Frequency and percentage distribution according to socio demographic variable**n = 30**

S.no.	Demographic data	Category	Frequency & percentage of experimental group		Frequency & percentage of control group	
			Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
1.	Age (in years)	1. 19 to 25 years	4	26.7	2	13.3
		2. 26 to 30 years	7	46.7	8	53.3
		3. 31 to 35 years	3	20.0	3	20.1
		4. Above 35	1	6.6	2	13.3
2.	Education	1. No formal education	1	6.7	4	26.7
		2. Primary education	3	20.0	2	13.3
		3. Secondary education	2	13.3	1	6.7
		4. Senior secondary education	4	26.7	1	6.7
		5. Graduation & above	5	33.3	7	46.6
3.	Occupation	1. House wife	7	46.7	12	80.0
		2. Working	8	53.3	3	20.0
4.	Area of living	1. Rural	6	40.0	8	53.3
		2. Urban	9	60.0	7	46.7
5.	Gravida	1. Primigravida	4	26.7	5	33.3
		2. Multigravida	11	73.3	10	66.7
6.	Parity	1. Primiparous	6	40.0	6	40.0
		2. Multiparous	9	60.0	9	60.0
7.	History of previous delivery	1.No	6	40.0	6	40.0
		2. Yes	9	60.0	9	60.0
8.	Previous mode of delivery	1. No previous mode of delivery	6	40.0	6	40.0

		2. Caesarean section	4	26.7	5	33.3
		3. Normal vaginal delivery	5	33.3	3	20.0
		4. Instrumental delivery	0	0	1	6.7
9.	Dietary habit	1. Vegetarian	7	46.7	7	46.7
		2. Non vegetarian	8	53.3	8	53.3

OBJECTIVE 1 : To assess the effect of early ambulation on selected aspects of post operative recovery among post caesarean mothers in experimental and control group.

TABLE - 2 (a)

Frequency, percentage and mean distribution of post operative recovery among post caesarean mothers in experimental group.

n=15

Post operative recovery level	Scores	Frequency	Percentage %	
Poor	0-10	0	0	Mean =25.13
Good	11-20	0	0	
Excellent	21-30	15	100 %	
TOTAL	30	15	100 %	

Minimum score = 00

Maximum score = 30

TABLE – 2 (b)

Frequency, percentage and mean distribution of post caesarean recovery among post caesarean mothers in control group.

n=15

Post caesarean recovery level	Scores	Frequency	Percentage %	Mean =19.53
Poor	0-10	0	0	
Good	11-20	11	73.3 %	
Excellent	21-30	4	26.7 %	
TOTAL	30	15	100 %	

Minimum score = 00

Maximum score = 30

Objective 2 : To compare the post interventional postoperative recovery among experimental group and control group.

TABLE – 3

Mean & mean percentage comparison of post operative recovery scores among post caesarean mothers in experimental group and control group

n = 30

Aspects	Mean	Mean %	SD	Unpaired 't' test	Df
Experimental group	25.13	83.76	2.03	6.638*	28
Control group	19.53	65.1	2.55		
Enhancement	5.6				

* Significant at p =<0.05

Objective 3 : To find out association between selected aspects of post operative recovery among post caesarean mothers in experimental group with selected demographic variables.

Table – 4**n = 15**

S.no.	Demographic variable	Poor		Good		Excellent		Df	P value	χ^2 Value
		n	%	n	%	n	%			
1.	Age (in years)							6	12.59	0**
	1) 19 – 25	0	0	0	0	4	26.6			
	2) 26 – 30	0	0	0	0	7	46.7			
	3) 31 – 35	0	0	0	0	3	20			
	4) Above 35	0	0	0	0	1	6.7			
2.	Education							8	15.51	0**
	1) No formal education	0	0	0	0	1	6.7			
	2) Primary education	0	0	0	0	3	20			
	3) Secondary education	0	0	0	0	2	13.3			
	4) Senior secondary education	0	0	0	0	4	26.7			
	5) Graduation & above	0	0	0	0	5	33.3			
3.	Occupation							2	5.99	0**
	1) House wife	0	0	0	0	7	46.7			
	2) Working	0	0	0	0	8	53.3			
4.	Area of living							2	5.99	0**
	1) Rural	0	0	0	0	6	40			
	2) Urban	0	0	0	0	9	60			
5.	Gravida							2	5.99	0**
	1) Primigravida	0	0	0	0	4	26.7			
	2) Multigravida	0	0	0	0	11	73.3			

6.	Parity									
	1) Primiparous	0	0	0	0	6	40	2	5.99	0**
	2) Multiparous	0	0	0	0	9	60			
7. I	History of previous delivery									
	1) No	0	0	0	0	6	40	2	5.99	0**
	2) Yes , If yes then	0	0	0	0	9	60			
II	Previous mode of delivery									
	1) No previous delivery	0	0	0	0	6	40	6	12.59	0**
	2) Caesarean section	0	0	0	0	4	26.7			
	3) Normal vaginal delivery	0	0	0	0	5	33.3			
	4) Instrumental delivery	0	0	0	0	0	0			
8.	Dietary habits									
	1) Vegetarian	0	0	0	0	7	46.7	2	5.99	0**
	2) Non vegetarian	0	0	0	0	8	53.3			

* = Significant at $p < 0.05$ ** = Non significant at $p < 0.05$ **SUMMARY :**

The present study was conducted to assess the effectiveness of early ambulation on selected aspects of post operative recovery among post caesarean mothers admitted in selected hospital, Lucknow. The conceptual framework set up for the study was based on the Roy's Adaptation Model. The design adopted for the study was quasi experimental non randomized control group design. The samples were selected by non probability convenience sampling techniques and 30 post LSCS women who got admitted to Career Hospital and those who fulfill the inclusion criteria was selected for the study. The study result shows that the mean post interventional post operative recovery scores in experimental group were higher than the mean post operative recovery score in control group. Descriptive and inferential statistics were employed to analyze the data. The analysis was carried out on the basis of objectives and hypothesis of the study. Frequency and percentage were used to represent the sample characteristics and level of post operative recovery were analyzed through mean, SD and mean percentage. The association of post operative recovery among experimental group with selected demographic variables were assessed by using chi square.

CONCLUSION:

The study “A study to assess the effectiveness of early ambulation on selected aspects of post operative recovery among post caesarean mothers admitted in selected hospital, Lucknow” conclude that the early ambulation practice improve early maternal recovery and good sense of wellbeing after CS. The finding of the study revealed that the early ambulation improve the activity of daily living also enhance the post operative recovery after caesarean section and also improve the wellbeing of mother as well as newborn.

NURSING IMPLICATIONS :

The study had drawn implications for various areas such as nursing practice, nursing education, nursing administration and nursing research.

Implications for nursing practice

1. The nurses must have the knowledge to provide non-pharmacological, cost effective approaches to improve the self care activities and its comfort to the women during post operative period.
2. Nursing personnel can incorporate the provision of early ambulation in first postoperative day as a routine part of level of post operative recovery in their clinical practice.

Implications for nursing education

1. Continuing nursing education programme is the key components to update and improve the knowledge of all nursing personnel .
2. The nursing students should be taught the importance of post operative care and wound healing among the post caesarean section mothers.

Implications for nursing administration

1. With technological advances and ever growing challenges of health care means, the administrations have a responsibility to arrange nurses with substantive continuing education opportunities regarding post operative recovery.
2. The nurse administrators can motivate, supervise and take initiative to implement the early ambulation on post operative recovery among post caesarean women.

Implications for nursing research

1. It is necessary to undertake more research in the field of early ambulation and post operative recovery among women underwent caesarean section to achieve holistic care to clients in the post operative period.
2. One of the aim of nursing research is to explain the scope of nursing findings of the study which will provide baseline data regarding early ambulation and post operative recovery. Hence it can be used for further studies in their area.

RECOMMENDATIONS :

On the basis of the findings of the study the following recommendations were made.

1. The similar study can be conducted on a large group of samples.
2. A same study can be done with quasi experimental time series research design.
3. A similar study can be conducted with the more aspects of post operative recovery such as assessment of lochia and uterine involution.
4. A similar study can be conducted by dividing the intervention into early and late ambulation.

LIMITATIONS :

- The study was limited to only 30 post caesarean mothers.
- The study was limited to the post caesarean mothers admitted in postnatal ward at Career Hospital, Lucknow.
- Non probability convenience sampling technique was used for the study, which again restricts the generalization of the study.
- Ward routine care is limiting the study in control group

REFERENCES:

1. Orshman AS. Maternity Newborn and Women's Health Nursing.1 edition. Philadelphia: Lippincott Williams and Wilkins publishers; 2008. Pg. 374 - 375
2. Fraser DM, Cooper MA, Fletcher G. Myles Textbook of Midwives. 14 edition. Philadelphia : Churchill Livingstone, 2003, Pg. 256
3. WHO [home page on internet].Geneva: The organisation; [May 2015].Available from <http://www.who.int/mediacentre/factsheets/fs348/en>
4. Howard Jacqueline, CNN. (20-10-18) WHO [home page on internet]. Geneva: The organisation; Available from :[http:// www. who. int/ maternal child _adolescent/epidemiology/maternal.9](http://www.who.int/maternal-child-adolescent/epidemiology/maternal.9)
5. http://www.who.int/reproductive_health/index.htm
6. Kehlet H, Wilmore DW: Evidence-based surgical care and the evolution of fast track surgery. Ann Surg. 2008; 248(2): 189–98.
7. American College of Obstetricians and Gynecologists (2014): Society for Maternal-Fetal Medicine. Obstetric care consensus no. 1: safe prevention of the primary caesarean delivery. Obstetric Gynecol. Mar. 123 (3):693-711.
8. Arjun G. Caesarean section : Evaluation, guidelines & recommendations. IJME. 2018 ; Vol. 3 (July – Sep. 2018)
9. Padmadas SS, Kumar S, Nair SB, Kumari A. Caesarean section delivery in Kerala, India: evidence from a National Family Health Survey. Soc Sci Med. 2018;51(4):511-21.

11. World Health Organisation. Monitoring emergency obstetric care: a handbook. Geneva, Switzerland;2016
12. Lewsi G, Drife J. Why Mothers Die. The Fifth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. London: RCOG Press; 2016
13. Berghella V. R., (2017): Cesarean delivery: Postoperative issues. <http://www.uptodate.com/home>
14. Julie R. (2016): 13 ways to improve recovery after a C-section 12(3): 29-32, Published May 29, 2017
15. Basavanthappa BT. Nursing theories. 1st ed. New Delhi: Jaypee Brothers; 2007.
16. Brar K Navdeep , Rawat HC . Textbook of Advance Nursing Practice . Second Edition New Delhi : Jaypee Brother's Medical Publisher Pvt. Lmt. ; 2015 . Pg. 467- 469
17. Sharma K Suresh. Nursing Research & Statistics . Second Edition New Delhi : Reed Elsevier India Pvt. Lmt ; 2015. Pg. 374-76
18. Paul, R., Narayan, P.J.P. & Kaur, H. (2019). Effectiveness of early ambulation on post operative recovery among the women with caesarean section (CS). International Journal of Trend in Scientific Research and Development, 3 (3), 851-855.

