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A Study to Assess the Effectiveness of Pre Operative Teaching on Knowledge Regarding Postnatal Care among Mothers Undergoing Elective Lower Segment Cesarean Section (LSCS) at Shri Vinoba Bhave Civil Hospital, Silvassa, Dadra and Nagar Haveli

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ABSTRACT

Introduction: Knowledge regarding the pregnancy, labor and postnatal care has the positive influence on the mothers, Knowledge about what to expect during the postnatal period is one of the best ways to improve the health of mother and baby and prevent the complications, with a view to this, the study was conducted to assess the effectiveness of pre operative teaching on knowledge regarding postnatal care among mothers undergoing elective cesarean section at Shri Vinoba bhave Civil Hospital, Silvassa. Evaluate the effectiveness of pre operative teaching on postnatal care among mothers undergoing elective lower segment cesarean section. Associate the pre-test level of knowledge regarding postnatal care among mothers undergoing elective lower segment caesarean section with selected sociodemographic variables. Quasi experimental, pre-test-post-test control group research design with non probability, purposive sampling technique was used to selected 60 elective caesarean section mothers falls in inclusion criteria, Interview schedule consist of two section such as Socio-demographic variables, Structured knowledge questionnaire (30 items). Validity and reliability were established. Pretest was conducted followed by pre operative teaching regarding postnatal care and after 7 days post test was conducted. The data obtained were analysed using descriptive and inferential statistics. Overall the calculated "t" value was (25.76), mean difference was (11.47), p-value was less than 0.05 which shows highly significant. Association was assessed by chi-square which it shows there was significant association between educational status of mother ($\square 2_{(5.0.05)} = 19.084$, 0.00185; p<0.05), educational qualification of husband ($\square 2_{(6.0.05)}=14.186$, 0.0276; p<0.05) and religion ($\square 2_{(3.0.05)}=12.347$, 0.0062; p<0.05). Present study shows that pre operative teaching regarding postnatal care among mothers undergoing elective caesarean section was effective method for increasing the knowledge regarding postnatal care.

Key word: Elective lower segment cesarean section, pre operative teaching, postnatal care, t test and chi-square.

1. Introduction

1.1 Background of the study



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Giving birth to a child is one of life's most blissful experiences and the nine months of pregnancy is an exciting time for many women and their partners. 'Post natal' is a Latin word, which means 'after birth'. It is the period which begins immediately after the birth of the child extended for 6 weeks. The period is known as post partum or puerperium. Cesarean section (C-section) is surgery to deliver a baby. After this surgery most of the mother has to go through pain, bleeding, less milk production, less bonding of mother and baby. Preoperative teaching meets the patients need for information regarding breast feeding, new born care, hygiene, ambulation, diet, postnatal exercise and family planning, and follow up. Patients who are more knowledgeable about what to expect after surgery, and who have an opportunity to express their goals and opinions, often cope better with postoperative pain and decreased morbidity. Preoperative care is extremely important prior to any invasive procedure, regardless of whether the procedure is minimally invasive or a form of major surgery. Knowledge about what to expect during the postnatal period is one of the best ways to improve the patient's health. Teaching mothers regarding expected care to be taken after delivery can helps to prevent the complications. This includes the opportunity for the patient to practice; breast feeding, new born care, hygiene, ambulation, diet, postnatal exercise, family planning and follow up. This helps the patients in early recovery and overcoming any risk, which may occur during post operative period.

1.2 Need of the study

According to World Health Organization (WHO), caesarean section use continues to rise globally, now accounting for more than 1 in 5 (21%) of all childbirths. This number is set to continue increasing over the coming decade, with nearly a third (29%) of all births likely to take place by caesarean section by 2030, the research finds.

The fifth NFHS — done in two phases between June 2019 and January 2020, and January 2020 and April 2021, and released by the health ministry Wednesday — showed that the national C-section rate is 21.5 percent, higher than what the World Health Organization terms "ideal", 10-15 percent.

According to data collected by the Union Ministry of Health Management Information System (HIMS), In 2008-09 the public hospitals registered total 73.13 lakh, of which 4.16 lakh were c-section, over 14% of the total birth in 2018-2019 took place through c-section around 19 lakh births out of the total 1.3 crore in public hospital. In private sector 4 lakh in 2008-09 to 20.5 lakh in 2018-19.

During the clinical experiences, the student researcher found that, women shows less knowledge regarding postnatal care among mothers undergoing elective caesarean section which motivate the researcher to educate about the preoperative teaching on postnatal care, based on maternal and neonatal benefits & reduction of postpartum complications.

1.3 Objectives of the study

- 1. Assess the level of knowledge regarding postnatal care among mothers undergoing elective lower segment cesarean section between the experimental and control group.
- 2. Determine the effectiveness of pre operative teaching on postnatal care among mothers undergoing elective lower segment cesarean section.
- 3. Find out the association between pretest level of knowledge regarding postnatal care among mothers undergoing elective lower segment cesarean section with their selected sociodemographic variables.



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1.4Hypothesis

H1: There is a significant difference in level of knowledge regarding postnatal care between the experimental and control group of mothers undergoing elective lower segment cesarean section after the pre operative teaching at the 0.05 level of significance.

H2: There is a significant association between pretest level of knowledge regarding postnatal care among mothers undergoing elective lower segment cesarean section with their selected sociodemographic variables at the 0.05 level of significance.

1.5 Operational definition

Assess :It refers to the method of estimating the pre operative teaching on postnatal care among mothers undergoing elective lower segment cesarean section.

Effectiveness: It refers to the significant gain in knowledge which will be determined by significant difference in pretest and posttest score of experimental and control group after pre operative teaching on postnatal care mothers who have undergone elective cesarean section.

Knowledge: It refers to the extent of some of what is know to the mothers undergoing elective lower segment cesarean section regarding postnatal care.

Preoperative teaching: It refers to the activities of teaching to the antenatal mother who are undergoing elective cesarean section regarding postnatal care which includes diet, neonatal care, breastfeeding, postnatal exercise and ambulation, hygiene, family planning and follow up.

Postnatal care: In this study it includes aspects of postnatal care which includes diet, neonatal care, breastfeeding, postnatal exercise and ambulation, hygiene, family planning and follow up.

Mother: It refers to mothers who are admitted for elective lower segment cesareansection at Shri Vinoba Bhave Civil Hospital and fulfills all inclusion criteria.

Elective cesarean section : In this study refers to the mothers who are planned to deliver by lower segment cesarean section and admitted one day prior and who can come for follow up in Shri Vinoba Bhave Civil Hospital, Silvassa, Dadra & Nagar Haveli.

1.6 Delimitations

- a. Mothers admitted for elective lower segment cesarean section.
- b. Mothers with gestational age more than 38 weeks of gestation.
- c. Mothers who understand and speak Hindi, Gujarati and English.
- d. Mothers who willing to participate in the study.

2. Methodology

Research approach: Quantitative research approach

Research design: Quasi experimental, pre test – post test control group research design



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Study setting: Shri Vinoba Bhave Civil Hospital, Silvassa, Dadra & Nagar Haveli

Target population: All elective lower segmental cesarean section mothers

Accessible population: Elective lower segmental cesarean section mothers admitted at SVBCH

Sample: 60 (30 for control group and 30 for experimental group) mothers admitted in SVBCH for

elective LSCS

Sampling technique: Non probability, Purposive sampling technique

Variables:

Independent variables: Preoperative teaching on postnatal care after cesarean section

Dependent variables: Knowledge on postnatal care

Data collection instruments: Structured interview schedule

Section I : Socio demographic variables

Section II: Structured knowledge questionnaire on postnatal care

SR. NO.	LEVEL OF KNOWLEDGE	SCORE	PERCENTAGE
1	Poor	0-7	≤25%
2	Average	8-15	26-50%
3	Good	16-23	51-75%
4	Very Good	24-30	≥76%

Intervention: Preoperative teaching on postnatal care

Intervention and Analysis: Descriptive and Inferential statistics

3. Data Analysis

Section I:Analysis of frequency and percentage distribution of mothers underwent elective cesarean section according to their socio-demographic variable.

Table 1: Frequency and percentage distribution of mothers underwent elective cesarean section according to their socio-demographic variable.

n = 60

Sr.	Socio-Demographic Variables	Frequency (f)	Percentage (%)
No.			
1.	Age (in years)		
	18-24 years	18	30
	25-30 years	31	51.7
	31-35 years	8	13.3
	>35 years	3	5
2.	Educational status of the mother		
	Professional	0	0
	Graduate/ Post graduate	8	13.3



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Sr.	Socio-Demographic Variables	Frequency (f)	Percentage (%)
No.			
	Intermediate/ Diploma	4	6.7
	High school	21	35
	Middle school	1	1.7
	Primary school	18	30
	No formal education	8	13.3
3.	Occupation of mother		
	Professional	2	3.3
	Semi professional	3	5
	Shop / Farm	0	0
	Skilled worker	0	0
	Semiskilled worker	6	10
	Unskilled worker	8	13.3
	Home maker	41	68.3
4.	Education qualification of husband		
	Professional	0	0
	Graduate/ Post graduate	11	18.3
	Intermediate/ Diploma	7	11.7
	High school	23	38.3
	Middle school	7	11.7
	Primary school	7	11.7
	No formal education	5	8.3
5.	Occupation of husband		
	Professional	0	0
	Semi professional	1	1.7
	Shop / Farm	4	6.7
	Skilled worker	34	56.7
	Semiskilled worker	14	23.3
	Unskilled worker	7	11.7
	Home maker	0	0
6.	Family monthly income in rupees		
= *	>41430	1	1.7
	20715-41429	3	5
	15536-20714	18	30
	10357-15535	24	40
	6214-10356	11	18.3
	2092-6213	3	5
	<2091	0	0
7.	Residency		
	D & NH, DD	13	21.7
	Gujarat	19	31.7

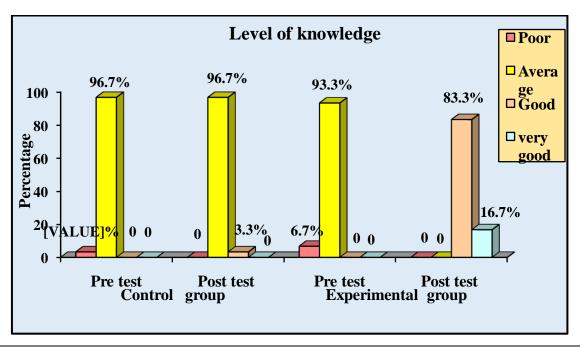


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Sr.	Socio-Demographic Variables	Frequency (f)	Percentage (%)
No.			
	Maharashtra	19	31.7
	Other state	9	15
8.	Type of family		
	Joint	46	76.7
	Nuclear	12	20
	Extended	2	3.3
9.	Religion		
	Hindu	37	61.7
	Muslim	10	16.7
	Christian	12	20
	Specify if any other	1	1.7
10.	Previous knowledge about post		
	operative care		
	Yes	37	61.7
	No	23	38.3
11.	Source of information		
	Family and friends	9	24.32
	Mass media	1	2.70
	Health care worker	27	72.97
	Specify if any other	0	0

Section II : Comparison of level of knowledge on postnatal care among mothers undergoing elective cesarean section.

FIGURE: 1: Comparision of level of knowledge on postnatl care among mothers undergoing elective ceasarean section.





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Figure shows that pretest and posttest level of knowledge on postnatal care among experimental and control group. In control group pretest findings shows that 3.3% of them have poor, 96.7% have average and no one have good or very good level of knowledge whereas in posttest 96.7% have average and 3.3% have good level of knowledge.

In experimental group pretest findings shows that 6.7% of them have poor and 93.3% of them have average level of knowledge which was increased in posttest to 83.3% have good and 16.7% of them have very good level of knowledge.

It shows that pre operative teaching on post-natal care among mothers undergoing elective lower cesarean section was effective.

SectionIII :Evaluate of the effectiveness of pre operative teaching on postnatal care among mothers underwent elective cesarean section.

Unpaired "t"-test was found between control and experimental group posttest to evaluate the effectiveness of pre operative teaching on knowledge regarding postnatal care among mothers underwent elective caesarean section.

FIGURE :2 : Comparison of mean score of control and experimental group post test among mothers undergoing elective LSCS.

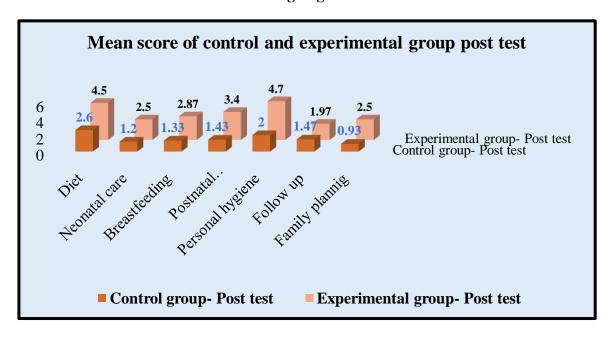


Figure shows that for the component of diet the calculated "t" value was (9.51), mean difference was (1.9), p-value was less than 0.05, for neonatal care the calculated "t" value was (6.54), mean difference was (1.3), p-value was less than 0.05, for breastfeeding the calculated "t" value was (7.74), mean difference was (1.53), p-value was less than 0.05, for postnatal exercise and ambulation the calculated "t" value was (8.5), mean difference was (1.97), p-value was less than 0.05, for personal hygiene the calculated "t" value was (11.45), mean difference was (2.7), p-value was less than 0.05, for follow up



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the calculated "t" value was (4.56), mean difference was (0.5), p-value was less than 0.05, for family planning the calculated "t" value was (9.55), mean difference was (1.57), p-value was less than 0.05.

For overall the calculated "t" value was (25.76), mean difference was (11.47), p-value was less than 0.05. which shows that pre operative teaching was effective to increase the knowledge regarding postnatal care.

Hypothesis (H1) is accepted.

Hence, the research hypothesis (H1) was accepted it was inferreted that the mean posttest knowledge score of mothers undergoing elective cesarean section is higher in experimental group than the control group. This indicates that the preoperative teaching was effective in increasing in knowledge level of mothers undergoing elective cesarean section.

Section IV :Association between pre test level of knowledge on postnatal care with selected sociodemographic variables.

Table 8: Association between pre test level of knowledge on postnatal care with selected sociodemographic variables.

n = 60

Sr.	Socio-Demographic	Below	Above	□2 ,	p-value
No.	Variables	Median	Median	Df	
1.	Age (in years)				
	18-24 years	13	05		
	25-30 years	16	15	2.83,	0.4,
	31-35 years	05	03	(df=3)	NS
	>35 years	01	02		
2.	Educational status of the				
	mother				
	Graduate/ Post	03	05		
	graduate				
	Intermediate/	02	02	19.084,	0.00185,
	Diploma	15	06	(df=5)	S
	High school	10	01		
	Middle school	00	08		
	Primary school	05	03		
	No formal education				
3.	Occupation of mother				
	Professional	01	01		
	Skilled worker	02	01	5.461,	0.243,
	Semiskilled worker	01	05	(df=4)	NS
	Unskilled worker	06	02		
	Home maker	25	16		
4.	Education qualification of				



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	husband				
	Professional	06	00		
	Graduate/ Post	00	00		
		00	05		
	graduate Intermediate/	00	03	1/10/	0.0276
		02	04	14.186,	0.0276,
	Diploma	03	04	(df=6)	S
	High school	14	09		
	Middle school	05	02		
	Primary school	03	04		
	No formal education	04	01		
5.	Occupation of husband				
	Semi professional	00	01		
	Shop / Farm	03	01	2.754,	0.599,
	Skilled worker	20	14	(df=4)	NS
	Semiskilled worker	07	07		
	Unskilled worker	05	02		
6.	Family monthly income in				
	rupees				
	>41430	00	01		
	20715-41429	01	02		
	15536-20714	09	09	6.125,	0.294,
	10357-15535	15	09	(df=5)	NS
	6214-10356	09	02		
	2092-6213	01	02		
7.	Residency				
	D & NH, DD	06	07		
	Gujarat	12	07	2.485,	0.47800,
	Maharashtra	13	06	(df=3)	NS
	Other state	04	05		
8.	Type of family				
	Joint	27	19		
	Nuclear	06	6	1.774,	0.411,
	Extended	02	00	(df=2)	NS
9.	Religion				
	Hindu	24	13		
	Muslim	01	09	12.347,	0.0062,
	Christian	09	03	(df=3)	S
	Specify if any	01	00		
	other				
10.	Previous knowledge about				
	post operative care				
	Yes	23	14	0.582,	0.4455,
	No	12	11	(df=1)	NS



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11.	Source of information				
	Family and friends	07	02	2.673,	0.2627,
	Mass media	00	01	(df=2)	NS
	Health care worker	16	11		

*p<0.05 significant, ** p<0.01 & ***p<0.001 Highly significant.

Hence, research hypothesis (H2) was accepted as the calculated value is more than table value at 0.05 level of significant for level of knowledge in selected socio-demographic variables which include educational status of mother, educational qualification of husband and religion.

Research hypothesis (H2) was rejected as the calculated value is less than table value at 0.05 level of significance for level of knowledge in selected socio-demographic variables which include age, occupation of mother, occupation of husband, family monthly income in rupees, residency, type of family, previous knowledge about post operative care, source of information.

4. Discussion

Effectiveness of pre operative teaching on knowledge regarding postnatal care among mothers undergoing elective lower segment cesarean section.

Aarthi J. conducted the similar study shows to assess effectiveness of preoperative teaching on postoperative outcome among mothers who undergo elective caesarean section in government headquarters hospital at Kanchipuram. The result shows that in control group, mean percentage was 14.63, whereas in experimental group it was 24.6. The improvement score of mean value was 9.96 and standard deviation was 4.94 and the 't' value was 15.36. This shows a significant improvement in the health status among mother who underwent elective caesarean section.

Association between pre test level of knowledge among mothers undergoing elective lower segment cesarean section with selected demographic variables.

Rajan E., Nayak S. Effectiveness of self instructional module on knowledge of post operative self care for mothers undergoing elective caesarean section in selected hospitals, mangalore. The study result shows that there was significant association between the level of knowledge and demographic variables namely age, education, monthly income, religion exposure to health awareness and history of caesarean section.

5. Conclusion

Mothers can experience lack of knowledge regarding postnatal care who admitted for elective cesarean section. Lack of knowledge regarding postnatal care have negative impact on health of mothers undergoing elective cesarean section. To reduce the negative impact of lack of knowledge various strategies can be included such as pre operative teaching on postnatal care. Thus, study assessed the effectiveness of pre operative teaching on knowledge regarding postnatal care among mothers undergoing elective lower segment cesarean section and conclude that pre operative teaching was effective in increasing the level of knowledge.



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6. Limitation

- The study was limited only to the patient who undergoing elective cesarean section
- Limited to 60 samples (30 each in experimental and control group)
- Findings could be generalized only for hospitalized elective cesarean section mothers who full filled inclusion criteria in the study.

7. References

- 1. Pregnancy and birth: Overview. National Library of Medicine: National Center for Biotechnology Information, 2021. https://www.ncbi.nlm.nih.gov/books/NBK279579/
- 2. World Health Organization. Cesarean Section Rates continue rise, amid growing inequalities in access. https://www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access
- 3. Ghosh A. The national C-section rate is 21.5%, higher than what the World Health Organization terms "ideal", 10-15%, according to National Family Health Survey. 26 November, 2021. https://theprint.in/india/21-5-of-all-births-in-india-are-through-c-section-far-above-who-ideal-of-10-15-shows-nfhs/771710/
- 4. Aarthi J. Effectiveness of preoperative teaching on postoperative outcome among mothers who undergoing elective ceasarean section mothers. April 2012. http://repository-tnmgrmu.ac.in/12941/1/300308312aarthi.pdf
- 5. Altman A., Helpman L., et. al. Enhanced recovery after surgery: implementing a new standard of surgical care. Vo. 191(17); 29 April 2019; doi: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6488471/
- 6. Cleveland Clinic. C Section. https://my.clevelandclinic.org/health/treatments/7246-cesarean-birth-c-section#:~:text=A%20C%2Dsection%2C%20also%20called,your%20baby%20is%20at%20risk
- 7. Lobo D. Effectiveness of Preoperative Teaching in Promoting Postoperative Outcome among Patients Undergoing Abdominal Surgery. 2016. http://hdl.handle.net/10603/135348
- 8. Dr. Eied S, Dr. Higazi M. Effect of preoperative preparation on patients outcome among patients undergoing surgical operations. International Journal of Research Granthaalayah; 8(8), 346-355; granthaalayah. V8. i8.2020.441 https:// doi.org/ 10.29121/. https://www.researchgate.net/publication/344234126
- 9. Zarei M., Rostami F., Effect of Self-care Training Program on Surgical Incision Wound Healing in Women Undergoing Cesarean Section. Med Surg Nurs J. 2020;9(4):e108800. doi: 10.5812/msnj.108800. https://brieflands.com/articles/msnj-108800.
- 10. Bouchrikal. How to Write Research Methodology; Overview, Tips, and Techniques. October 16. Guide 2 Research.
- 11. Chetty, P. Importance of research approach in research. 2016. https://www.projectguru.in/selecting-research-approach in research. 2016.
- 12. Polit FD, Beck TC. Textbook of nursing research, 10th edition. Published btwolersluwer; New Delhi Pvt. Ltd India.
- 13. Business research methodology. https://researcher-methodology.net/research-methodology/data-collection/