



## Original Research Article

## Effect of learning package on knowledge and practice regarding self care and child care among women undergoing caesarean section at bankurasammilani medical college and hospital, bankura, West Bengal

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## ARTICLE INFO

## Article history:

Received 14-05-2021

Accepted 26-05-2021

Available online 14-07-2021

## Keywords:

Bankura

BankuraSammilani

## ABSTRACT

A quasi experimental study on “effect of learning package on knowledge and practice regarding self-care and child care among women undergoing caesarean section at Bankura Sammilani Medical College and Hospital, Bankura, West Bengal” was conducted to find out the knowledge and practice and its association with selected factors among subjects and also the effect of learning package. Conceptual framework was developed based on Ludwig Von Bertalanffy’s system model. A quasi experimental study design was adopted. Convenience sampling technique was used to select 64 antenatal women. Structured interview schedule and structured knowledge questionnaire were used to collect data. Significant findings on statistical analysis of data were revealed that the mean post-test knowledge score (18.68) and practice score (26.06) of experimental group are higher than the mean post-test knowledge score (7.93) and mean post-test practice score (17.71) of control group with true mean difference in both the cases (“t” values 16.79, 15.18, p=0.05) which concludes that the learning package is effective to improve the knowledge and enhance the practice among the subjects. Educational level was found significant in relation to knowledge and practice scores among experimental group.

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## 1. Introduction

According to philosophy all women holds natural characteristics of a mother. Though the process of child birth is too much painful, still many of the women want to through this experience and flash with inexpressible joy after getting a child in their lap.

Generally pregnancy is a natural phenomenon, after experiencing some of trouble so many women cannot delivered a baby normally. Such type of women has undergone operative interference to obtain a baby. The aim of performing delivery is to save the life of mother and baby and this is materialized through the process of caesarean section. This surgery is being performed so frequently in all over the world. Many more factors are responsible for

performing cesarean birth rather than the other surgeries. One of the most known factors is that the 50% of the world population is female, so pregnancy is so common and it is seen through the decades that cesareans section is safer process of birth and which is easier to save the health & life of mother and child which method could not be through few decades ago. So caesarean section not the matter of fear but it is under glad acceptance as it ultimate aim is a healthy mother and baby regardless of process and technique of delivery.

It is true that there are some drawbacks of cesarean section, and the cesarean mothers have to face some of the problems, some are minors and some of major than the normal vaginal delivery. Post-operative problems like hospital stay for longer time, post-operative pain, ambulation, and problem unable to habituate to normal foods, breast engorgement, satisfaction bonding between

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mother and child, disturbance of bladder and bowel habit, lactation failure. Proper knowledge after baby birth is more important for returning to normal life activities and efficacious care for mother and baby. So prior knowledge regarding self-care and child care after cesareans section is always justified and insightful.

## 2. Objectives

1. To assess the knowledge of the antenatal women after administration of learning package
2. To assess the practice of the antenatal women after administration of learning package
3. To assess the effect of learning package by the difference of post -test knowledge and practice scores among women in experimental group and control group
4. To determine the association of knowledge and practice of women and selected demographic variables

## 3. Review of Literature

A study was conducted (in 2011) by Savitri.S, in Chennai Government hospital. To assess the learning needs and self-care practices regarding postnatal care among primipara mothers who underwent emergency LSCS. This study result showed that the primipara mothers had high learning needs regarding post natal care after emergency LSCS and their self-care practices were poor(40.8%) of primipara women had adequate knowledge regarding post natal care so learning needs was 59.2 % on an average on postnatal care. It was found that there was a significant positive moderate correlation between the learning needs and the self-care practices of primipara mother's who underwent emergency LSCSeffectiveness.<sup>1</sup>

A study (February 2017) was conducted by Easton ZS, Zafran N, Garmi G, Salim R. To assess post cesarean wound infection: prevalence, impact, prevention, and management challenges at Haifa, Israel an attempt was made to identify all relevant articles that reported the prevalence, impact, prevention, and management of post cesarean wound infection. The study result showed that cesarean delivery is one of the most frequent surgical interventions performed worldwide and accounts for up to 60% of deliveries in a number of countries.<sup>2</sup>

A study (November27, 2018) was conducted by Kayom OV, Kakura A and Kiguli S, Kampala, Uganda. To assess Newborn Care Practices among Mother-Infant Dyads in urban, Uganda. A community based cross-sectional descriptive study was conducted in the capital city of Uganda in the February to May 2012. Quantitative and qualitative data on the newborn care practices of eligible mothers were collected. The study results showed that over 99% of the mothers attended antenatal care at least once and the majority delivered in a health facility. Over 50%

of the mothers applied various substances to the cord of their babies to quicken the healing. Maximum mothers not given bathe their babies within the first 24 hours of birth, the majority had no knowledge of skin to skin care as a thermo protective method. Most of the mother's breastfed exclusively (93.2%) but only60.7% initiated breastfeeding within the first hour of life, while a significant number (29%) used pre lacteal feeds.<sup>3</sup>

A study (November 2017) was conducted by Joshi N, B.G, Bela K and MahidiyanV. On Effectiveness of structured teaching programme on knowledge about postnatal care among mothers. Purposive sampling techniques were used to select the study subject. The results showed that the overall mean pre-test knowledge score of postnatal mothers was  $19.8 \pm 2.98$  and mean post-test knowledge score of postnatal mothers was  $26.28 \pm 1.89$  and the mean difference was 6.48. The study result showed that the STP was fulfilled to improve mother's knowledge on postnatal care. There was no significant association found between pre-test knowledge score with their demographic variables.<sup>4</sup>

## 4. Materials and Methods

Quantitative research approach had been used for this study. Here the research design was non-equivalent post test only control group design and it was a quasi-experimental study. Sample size was 64 pregnant women 32 in each group both experimental and control group, who was admitted for elective cesarean section at BankuraSammilani Medical Collage and Hospital at antenatal ward. Data was collected by non-probability convenience sampling technique.

Data collection tool was used were semi structured interview schedule on socio demographic proforma of pregnant women, Structured knowledge questionnaire was used for assessment of knowledge and Structured interview schedule was used for assess stated practice of pregnant women. Teaching was given by teaching content consist of care of self and care of child after cesarean section which was several aspects like ambulation, rest and sleep, personal hygiene and from child care aspects like breast feeding, maintenanceof warmth, cord care, eye care. Teaching given regarding self- care and child care. Each question contains 1 mark. The content and language validity were established. The pilot study conducted on 10 pregnant women in each group revealed it to be feasible.

For main study the formal administrative permission was obtained. The purpose of the research study was explained to the participant. Experimental group was taken teaching from 10th December 2018 to 30<sup>th</sup> December 2018 at antenatal ward of BSMCH and control group not getting any teaching they only given post- test from 3rd December to 9<sup>th</sup> December 2018 at post natal ward of BSMCH, each session lasted for 20-45 minutes. Descriptive and inferential statistics like unpaired' test was used in form of SPSS and also Chi squire test was done and it was established that

educational level is strictly associated with knowledge level and practice level of women.

## 5. Results

Maximum number of women in both experimental and control group from the age of 24-28 years of age. The women of both group were house wife, maximum women was from rural community. In experimental group maximum women had get some previous knowledge but in control group they were having no previous knowledge regarding this topic. The result showed that the experimental group 71.8% of women had excellent knowledge and in control group 78.12% of women had poor knowledge in posttest. The mean knowledge score of women in experimental group after caesarean section was 18.68 with median being 19.00 and standard deviation of 1.85.

The mean knowledge score of women in control group after caesarean section was 7.93 with median being 8.00 and standard deviation of 3.18. The mean knowledge score in the experimental group is higher than the mean knowledge score of control group. The mean practice score of women in control group after caesarean section was 17.71 with median being 18.00 and standard deviation of 2.96. The mean practice score in the experimental group is higher than the mean practice score of control group. The frequency polygon In control group the knowledge scores mean lied left side of the median, so distribution is negatively skewed and skewness was (-0.066) and in experimental group the knowledge score mean lied left side of the median, so distribution was normally distributed. The frequency polygon of practice showed the distribution of experimental and control group was negatively skewed and skewness (-0.293), (-0.876), so it was normally distributed. The mean posttest knowledge score ( $18.68 \pm 1.85$ ) of women in experimental group is higher than the mean posttest knowledge score ( $7.93 \pm 3.18$ ) of control group with a mean difference of 10.75 which is found to be statistically significant as evidence from the corresponding t value (16.79) and mean difference is a true difference and not by chance and also the mean post-test practice score ( $26.06 \pm 1.47$ ) of women in experimental group is higher than the mean post- test practice score ( $17.71 \pm 2.96$ ) of control group with a mean difference of (8.35) which is found to be statistically significant as evidence from the corresponding's' value ( 15.18 and the mean difference is a true difference and not by chance, therefore it can be concluded that the learning package on self-care and child care after cesarean section is effective in improving practice of women undergone cesarean section.

## 6. Discussion

In the present study non probability convenience sampling technique was used. Knowledge regarding self-care and

child care after cesarean section was not dependent on women's age, occupation and previous acceptance of information. But their educational level has a positive effect on their knowledge or increasing of knowledge after administration of learning package. Learning package was effective on the level of education because there was a significant association seen between experimental and control group in post- test knowledge scores. So learning package has a positive impact on increasing of knowledge. Similarly learning package also improved the practice level of women in experimental group.

The present study is supported by a study done by Elizabeth Rajan&SabithaNayak in Mangalore on 40 mothers undergoing caesareans section by purposive sampling. Pre experimental research design was adopted, self-instructional module was given to the mother regarding ambulation, bowel and bladder care, personal hygiene, exercise, breathing exercise, breast feeding, baby care. Post-test taken on all the aspects by structured knowledge questionnaire. Calculated' value was (18.000,  $p < 0.001$ ) which proved that self-instructional module was effective in improving knowledge of mothers regarding self-care and baby care after caesarean section.<sup>5</sup>

The present study is supported by a quasi-experimental study conducted by Ms. Sunita Chowdhury in Mathura on caesarean section mothers to identify the effect of structured teaching programme about knowledge of mothers on early ambulation and its impact on the recovery after caesarean section. She divided the samples into two groups those were experimental and control. The mean pretest knowledge score of cesarean section mothers of control group were 10 and of experimental group were 10.3. The mean post-test knowledge score of control group was 11 and 24 of experimental group.<sup>6</sup>

The present study supported by a study of Sandhya Timilsina and RojanaDhakal which was carried out on post natal mother in Nepal regarding knowledge on postnatal care. In this study the educational level showed a significant association with knowledge level. The maximum mother were having secondary level of education (28.13%) chi square computed and showed that it was significant ( $\chi^2=48.75$  df 4 and  $p=0.001$ ). The researcher concluded that the learning package which was a teaching program consist of teaching session given to the women by the use of chart, poster, content of topic, flash card and hand out was effective to improve the knowledge and practice of the women undergoing caesarean section.

The present study findings are supported by the above mentioned findings. Present study also showed that the level of education has a positive impact on knowledge and practice level of the women.

**Table 1:** Frequency and percentage distribution of women according to their post-test knowledge scores in experimental and control group n=64; (nE=32,nC=32)

Knowledge score	Experimental group		Control group	
	Frequency	Percentage	Frequency	Percentage
Excellent >-80%(>18)	23	71.87	Nil	0.00
Good 60-80%(14-17)	09	28.13	01	3.12
Average 50-59%(11-13)	Nil	0.00	06	18.76
Poor <50%(<11)	Nil	0.00	25	78.12

**Table 2:** Frequency and percentage distribution of the women according to post test practice scores in experimental and control group n=64(n32- 5; nC-32)

Practice score	Experimental group		Control group	
	Frequency	Percentage	Frequency	Percentage
Excellent >-80(>22 )	32	100.00	02	6.25
Good 60-80-(17-22) 00		00.00	23	71.85
Average 40-59%(11-16)Nil		00.00	07	21.90
Poor <40 (<11)	Nil	00.00	Nil	0.00

**Table 3:** Mean, median, standard deviation of post-test knowledge scores of experimental and control group and independent 't' value computed between them n =64 (nE-32; nC-32)

Knowledge score	Mean	Mean difference	Median	Standard deviation	T value
Experimental-group	18.68	10.75	19.00	1.85	16.79
Control group	7.93		8.00	3.18	

't' 0.05,62=1.999; p=0.05

**Table 4:** Mean median, standard deviation of post-test practice scores of experimental and control group and independent 't' value computed between the mn =64 (nE-32; nC-32)

Practice score	Mean	Mean difference	Median	Standard deviation	T value
Experimental group	26.06	8.35	26.50	1.47	15.18
Control group	17.71		18.00	2.96	

't' 0.05,62=1.999; p=0.05

### 6.1. Implications of the study

The findings of the study have several implications which were discussed under the following areas:

### 6.2. Nursing education

Nursing education plays an important role in preparing the nurses for the wellbeing of the people in various areas. Post caesarean women need to be aware about various aspects of self-care and child care in the post natal period. The self-care aspect includes early ambulation, diet, personal hygiene, bowel and bladder, rest and sleep and the child care aspects includes breast feeding, maintenance of warmth, cord care and eye care. All are beneficial for post caesarean women who should be incorporated into nursing education so that we can educate the nurses to provide holistic care to their clients. The study indicates that proper teaching-learning activity can increase the knowledge level and improve practice which leads to early recovery of women

post operatively and prevent complications of newborn. Proper prior knowledge about self-care and child care indirectly reduce the maternal and infant morbidity and mortality. Nurse educators play a major role in motivating staff nurses & pupil nurses to give prior knowledge to the women undergone caesarean section by which women will gain knowledge to increase their confidence about care of self and her child after caesarean section.

### 6.3. Nursing practice

The obligation of nursing profession is the provision of care and service to the human beings. Several implications may be drawn from the present study for nursing practice. Health professionals, especially staff nurses should be motivated to give health teaching to the mother admitted for caesarean section about self-care and care of child in post-operative period in the aspect of –early ambulation, diet, rest and sleep, personal hygiene, breast feeding, maintenance of

warmth of new born, eye care and cord care. They should regularly conduct health assessment in order to appraise the health status of each post caesareans mother. The study reveals that the learning package is effective in enhancing knowledge and improving practice level of post caesarean women. Therefore proper teaching and education is the rights of women undergoing caesarean section and it positively improve the confidence level of the women.

#### 6.4. Nursing administration

Nursing administration is very important in the supervision and management of the nursing profession. The nurse administrators need to organize continuing nursing programs for nursing personnel and motivate them to give effective teaching to the antenatal women who are directed for caesarean section about self-care and child care in post-operative period. In that prospect nurses also have to gain knowledge in various aspects both mother and child care during post caesarean period. There should be provision for money in the budget for various activities like in-service education, advance training and conducting research in this field.

#### 6.5. Nursing research

Nursing practice is the backbone of nursing profession. Nursing profession totally depends upon nursing practice which is based on scientific knowledge and current and changing technology. Nursing research represent an important tool for nursing profession. By use of this tool improvement of knowledge, autonomy, accountability and confidence can be expanded. For better health care and reduction the care load due to management of complications, research plays a vital role. By the effective research study we can apply the new evidence based constructive knowledge and technique in patient care. Teaching positively improves the knowledge level through teaching regarding self-care and child care aspect which is very much important and effective for women who is going to be a mother by surgical intervention. A mother's life and her prognosis and adaptation depend upon her knowledge and application of that knowledge in her practice field. So emphasis should be given in the area of increase knowledge level and practice status by various kinds of teaching programs for the women who will go to operative intervention for being a mother. Researcher must publish findings of research carried out regarding the effect of learning package on knowledge and practice in professional journals to proclaim the research findings and its implication in field of nursing.

#### 7. Recommendations

On the basis of study some recommendation are constructed for upcoming research

1. The study can be replicated on or large samples for generalization.
2. A similar study can be carried out in private hospital setting.
3. A similar study can be conducted among normal delivery women.
4. A similar study can be conducted by the use of video assisted teaching method.
5. A comparative study can be conducted between rural and urban community or in different settings

#### 8. Conclusion

The study findings concluded that the learning package was effective for improvement of knowledge and practice regarding self-care and child care of women undergone cesarean section. If effective teaching can provide to the antenatal women regarding several aspects of care in post natal period then they can reduce their complications by using proper knowledge and we can achieve the goal of less maternal and neonatal mortality. Knowledge only can change the life and give wellbeing.

#### 9. Source of Funding

None.

#### 10. Conflict of Interest

None.

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**Cite this article:** Sarkar M. Effect of learning package on knowledge and practice regarding self care and child care among women undergoing caesarean section at bankurasammilani medical college and hospital, bankura, West Bengal. *IP J Paediatr Nurs Sci* 2021;4(2):48-53.