

A study to assess the effectiveness of structured teaching programme regarding birth preparedness on knowledge among primigravida mothers attending antenatal OPD's at selected Urban health centers of Sangli, Miraj and Kupwad Corporation area

Anjali Sunil Yadav¹, Archana Dhanawade²

^{1,2} Bharati Vidyapeeth (Deemed To Be) University, College Of Nursing, Sangli.

Received: 14 April 2020 Revised and Accepted: 8 August 2020

ABSTRACT: A quantitative study was conducted on “A study to assess the effectiveness of structured teaching programme regarding birth preparedness on knowledge among primigravida mothers attending antenatal OPD's at selected urban health centers of Sangli Miraj and Kupwad corporation area.” With objectives (i) To assess the existing knowledge regarding birth preparedness among primigravida mothers (ii) To assess the effectiveness of structured teaching programme on birth preparedness among primigravida mothers. (iii) To find out the association of Pretest knowledge score with selected demographic variables.

KEYWORDS: Birth preparedness, Structured teaching programme, Antenatal mothers

I. INTRODUCTION

Pregnancy is superb experience introduced by the nature for a women and special event of happiness, expectancy, excitement, anxiety and fear. So now days in maternity hospitals more importance is given to birth preparedness.¹

Pregnancy is state of carrying a developing fetus within body. The word “Pregnant” is derived from Latin word ‘Pre’ means before, ‘(g) natus’ means birth, so the pregnant means before giving birth.³

Pregnancy is the vital event in a woman's life. From the period of conception to the postnatal period it needs special attention. Antenatal care services are important for insuring the reproductive health of the women and better pregnancy outcome.⁵

Maternal mortality is substantial burden in developing countries. Improving maternal mortality has the received recognition at the global level as evidenced by the inclusion of reducing maternal mortality in millennium development goals. Since it is not possible to predict which women will experience life threatening obstetric complications that lead to maternal mortality, receiving care from skilled personnel (Doctors, Nurses or Midwives) during child birth has been identified as a single most important intervention for safe motherhood.⁷

OBJECTIVES

- 1) To assess the existing knowledge regarding birth preparedness among primigravida mothers.
- 2) To assess the effectiveness of structured teaching programme on birth preparedness.
- 3) To find out the association of pre-test knowledge score with selected demographic variables.

II. REVIEW OF LITERATURE

The review of literature for this study has been done under the following headings,

- 1) Literature related to birth preparedness.
- 2) Literature related to knowledge of primigravida mothers on birth preparedness.
- 3) Research studies related to the effectiveness of teaching interventions on birth preparedness.

1) Literature related to birth preparedness –

In a cross sectional study done by **Rajesh P.** and others (2016) in Karnataka out of the 371 pregnant mothers involving in the study, only 133 (35.85%) were prepared for child birth, 28.03% of women were aware of a single danger sign and 24.26% were able to mention at least one danger sign. Among all the subjects only 23% of the pregnant mothers were given knowledge about the threat sign by the health care workers. Among the socio demographic characteristics composed in this study, parity, education status of mother and husband and women who had child birth within two years was considerably associated with status of birth preparedness and difficulty readiness.⁹

Pervin J and others (2018) conducted a study to assess the information regarding maternal problems and factors associated with it in rural Matlab, Bangladesh. A community based cross sectional study was conducted by selecting samples randomly i.e. 2262 postnatal mothers who delivered a live or a still birth in the year 2014. A structured questionnaire was introduced in the process of data collection. After the data collection the study revealed that there was low level of knowledge among the mothers outlook BPCR interventions.¹¹

2) Literature related to the knowledge of primigravida mothers on birth preparedness.

Prativa Dhakal and others proposed a study knowledge on birth preparedness and difficulty eagerness in eastern area of Nepal in 2017. The main aim of the study was to assess the information related to birth preparedness and complication readiness. A descriptive cross sectional study was undertaken from November to December 2012. A total of ninety-three mothers who delivered a baby in the last twelve months earlier the survey in Jhorahat VDC of Morang district were involved in discussion. Only 45.2% and higher than half of the mother unexpectedly stated at least three aspects of BPCR and 3 threat signs through pregnancy respectively. Learning of mother was drastically associated with knowledge of BPCR. More than half of mothers had institutional delivery. Knowledge of BPCR was associated with place of delivery. Educated mothers were more alert of BPCR than uneducated. Thus, condition information, education and message considering women, family and the general community on BPCR are optional.¹⁴

Goli S and others (2015) performed a study to evaluate birth preparedness and its effects on delivery place and postnatal checkups around primi and multi gravida mothers, in Nepal. It was observed that only 32% of mothers were prepared for birth. The findings of the study also highlighted that the women who were well prepared for birth belonged to the larger age group, had advanced qualification. The result was found that birth preparedness is the main aspect in conducting institutional deliveries and post deliveries follow ups.¹⁶

3) Research studies related to the effectiveness of teaching interventions on birth preparedness.

In a study done by **Moke Magoma** et al (2016) conducted study to assess the effectiveness of birth preparedness plans and skilled care at institutional and in the postnatal period among antenatal care (ANC) attendees in a rural district of Northern Tanzania by Moke magoma (2013). Cluster random sampling technique was used in the study. In 24 weeks of gestation, 905 percent of women were employed and followed up to a postnatal period of at least one month. The result showed that the skilled delivery fear was higher in the control group. Postnatal anxiety was high in the first month of delivery. It was accomplished that the completion antenatal birth preparedness plans can improved the skilled delivery and post delivery care and provider's pleasure with accessible ANC services.¹⁸

Mrs. Lily Podder (2015) proposed a research to evaluate the usefulness of a video assisted newborn birth teaching programme on knowledge, antenatal behavior, and mother and baby outcome among primigravida mothers. 350 mothers were chosen from ANC OPD and labour room of municipal hospitals of pune city. The experimental group primi gravid mothers had revealed considerably better fulfillment to the intrapartum behavior in first; second, third and fourth stage of labour; and the use pain relieving drugs was significantly less. The proportion of normal vaginal delivery in experimental group was significantly higher and total duration of labour was also significantly lesser. Significantly lesser maternal complications in terms of perineal injury were seen in experimental group related to control group. Hence, structured video evaluated childbirth teaching programme prepare the primigravida mothers well for child birth. it also can help them to feel relaxed during the whole process of labour, thus having a favorable impact on the mothers and the newborn²⁰

Anjali Pushkar Tiwari et al proposed a research to review the usefulness of self structured informational booklet was prepared regarding birth preparedness and complication readiness among ASHA's. One group pretest posttest design was used to evaluate the result of self developed informational booklet regarding BPCR on knowledge of antenatal women were as a cross sectional study design was used for assessment of competencies of accredited social health activist(ASHA). The mean post-test knowledge score (21.52) of antenatal women after administration of informational booklet regarding BPCR was significantly higher than their mean pre test knowledge score (10.48) with t-calculated value of 22.307 ($p < 0.001$). only 30% of the ASHA's were found to be competent in delivering BPCR. It was found that the self developed informational booklet regarding BPCR is significantly effective in increasing the knowledge of antenatal women's. further rounds of training of ASHA's regarding BPCR were required to enhance their competencies²²

III. MATERIALS AND METHODS:

A quasi experimental one group pre test post test design was used to assess the efficiency of structured teaching programme about birth preparedness on knowledge among primigravida mothers attending antenatal OPD's at selected urban health centers of Sangli Miraj and Kupwad corporation area, by using non probability purposive sampling method 45 samples were preferred. A self structured questionnaire tool was used to evaluate the efficiency of structured teaching programme. "General system model by Ludwig Bertalanffy" was adopted as a theoretical base for framework of the study. Analysis was done using frequency and percentage distribution and paired test.

IV. RESULTS

SECTION I

TABLE NO. 1 FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES.

N=45

DEMOGRAPHIC VARIABLES	LEVELS	FREQUENCY	PERCENTAGE %
AGE IN YEARS	Below 20	11	24.44
	21-25	24	53.33
	26-30	10	22.22
OCCUPATION	Housewife	30	66.67
	Service	15	33.33
EDUCATION	primary	18	40
	Higher secondary	14	31.11
	Graduate	13	28.89
RELIGION	Hindu	30	66.67
	Muslim	10	22.22
	Christian	5	11.11
INCOME IN RUPEES	5001-10000	23	51.11
	11000-20000	22	48.89
TYPE OF FAMILY	Joint	28	62.22
	Nuclear	17	37.78
GESTATIONAL AGE IN WEEKS	27-31	17	37.78
	32-36	10	22.22
	37-40	18	40
PREVIOUS KNOWLEDGE	Yes	32	71.11
	No	13	28.89
IF YES, SOURCES	Family and peer group	15	46.88
	Health care workers	17	53.13

Table no 1. shows 11 mothers belongs to the group of below 20 yrs of age which may be due to the cultural aspect. 30 mothers are housewife's because Indians think that the main job of women is to be good mothers and wives. Maximum no. of mothers (i.e. 62.22%) lives in Joint Family as in sangli city still rural ethics are been followed. 66.67% of mothers belongs to Hindu religion .40 % of mothers are in the gestational age between 37-40 weeks ,37.78% of mothers are in the gestational age between 27-31 and 22.22% of mothers gestational age was between 32-36 weeks.

SECTION II

TABLE NO. 2 FREQUENCY AND PERCENTAGE OF PRE TEST AND POST TEST LEVEL OF KNOWLEDGE SCORES.

N = 45

Table no. 2 showed 22(48.89%) had poor knowledge, 23(51.11%) had average knowledge and none of them had good

Level of knowledge		Pre test		Post test	
		Frequency	Percentage %	Frequency	Percentage %
Poor	0-8	22	48.89	0	00
Average	9-16	23	51.11	11	24.44
Good	17-23	0	0	34	75.56

knowledge in pre-test.

In post test none of them had poor knowledge, 11(24.44%) mothers had average knowledge, and 34 (75.56%) mothers had good knowledge.

It was concluded from the above result that the structured teaching increased the knowledge level of primigravida mothers in the post test.

SECTION III

TABLE NO 3.COMPARISON OF PRETEST AND POST TEST KNOWLEDGE SCORE ON BIRTH PREPAREDNESS

N: 45

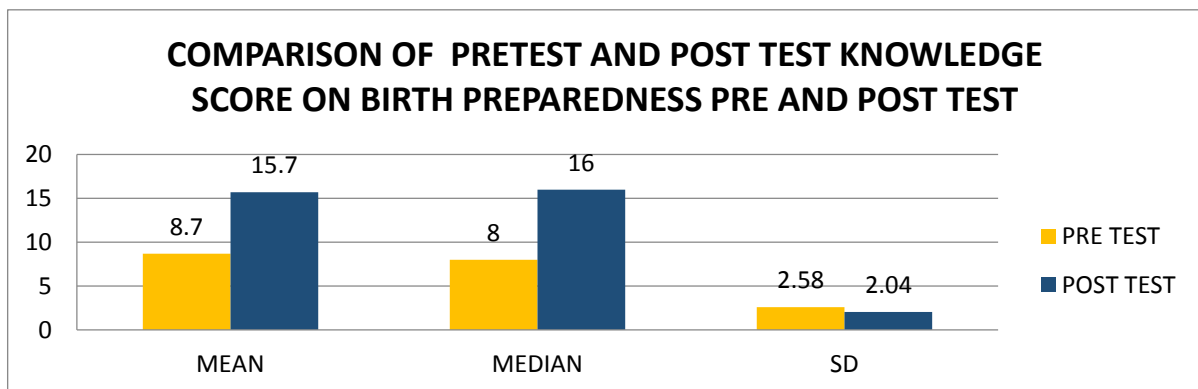
	N	MEAN	SD	t value	P VALUE
PRE TEST	45	8.73	2.73	17.847	0.00001
POST TEST	45	17	2.07		

There is statistically significant increase in post test score.

Tableno.3 shows that the average score of post test knowledge 17 was found to be significantly higher than average score pretest knowledge 8.73.

The statistics value of the t value (table value) was 17.847 and ‘p’ value 0.00001 shows that there is significant difference in the average knowledge score, at 5% level of significance.

Hence, H0 is rejected. As there is significant increase in the posttest knowledge score.



SECTION IV

TABLE NO. 4 ASSOCIATION OF PRE TEST LEVEL OF KNOWLEDGE SCORE WITH DEMOGRAPHIC VARIABLES

N=45

SR NO	DEMOGRAPHIC VARIABLES	CHI SQUARE TEST VALUE	P VALUE	INFERENCE
1	AGE	1.3001	0.522	NOT SIGNIFICANT
2	EDUCATION	0.232	0.8515	NOT SIGNIFICANT
3	OCCUPATION	0.1822	0.6695	NOT SIGNIFICANT
4	RELIGION	1.8056	0.405	NOT SIGNIFICANT
5	INCOME	1.0969	0.295	NOT SIGNIFICANT
6	TYPE OF FAMILY	1.0792	0.299	NOT SIGNIFICANT
7	GESTATIONAL AGE	0.9559	0.62	NOT SIGNIFICANT
8	PREVIOUS KNOWLEDGE	12.054	0.05	SIGNIFICANT

There was statistical significant association of knowledge scores with previous knowledge as the calculated chi square value was more than the table value at 0.05 level of significance. Whereas , there was no statistically significant association of primigravida mothers knowledge scores on preparation for birth with other demographic variables such as age ,education, occupation, type of family, religion, income and gestation age.

CONCLUSION

Among primigravida mothers, the Pretest knowledge about birth preparedness was evaluated. The primigravida mothers ' awareness, which revealed 22(48.89%) mothers had poor knowledge, 23(51.11%) mothers had average information, and none of them had good pre-test knowledge. In post test none of them had poor knowledge ,11(24.44%)mothers had average knowledge, 34(75.56%) mothers had good knowledge. The mean of posttest knowledge score 17 was found to be significantly higher than mean of pretest knowledge score 8.73. The statistics value of the t value (table value) was 17.847 and 'p' value 0.00001 shows that there is significant difference in the average knowledge score ,at 5% level of significance . The findings shows that the level of knowledge of primigravida mothers was improved by structured teaching in the post test.

REFERENCES

- [1] Richard M. Learning needs and self care practices of primipara mothers following emergency LSCS. *Nightingale Nursing Times* 2010 Mar;5(12):9-13.
- [2] Dr. (Mrs) NilimaR.Bhore, "Planned teaching programme improves knowledge about nosocomial infections among staff nurses in regional center in Maharashtra" in *Innovational Journal of Nursing and Healthcare (IJNH)*,2015
- [3] Anuchitra S. Attitude of antenatal mothers towards infant feeding. *Nightingale Nursing Times* 2011 Mar;6(12):6-10.
- [4] Dr. (Mrs) NilimaR.Bhore, "Disease burden of nosocomial infections and knowledge of nurses regarding the nosocomial infections: A Review" in *International Journal of Nursing Research (IJNR)* in December 2015.
- [5] Devi MK. Knowledge of antenatal mothers preparing for safe delivery. *Nightingale Nursing Times* 2011 Jun;7(3):37-9.
- [6] Dr. (Mrs) NilimaR.Bhore, " to assess the effect of back massage on let down reflex among mothers undergone cesarean section" in *International journal of science & research(IJSR)* in March 2016.
- [7] Mutiso SM, Qureshi Z. Birth preparedness among antenatal clients. *East African Medical Journal* 2008 Jun; 85(6):275-83
- [8] Dr. (Mrs) NilimaR.Bhore, " to test & prepare the effectiveness of video assisted teaching programme on primipara mothers regarding post-natal care" in *International Journal of Science and Research (IJSR)* in July 2016.
- [9] Rajesh P, Swetha R., Rajanna M. S., Krishna Iyengar, Mahesh S. H., CheluveGowda - A study to assess the birth preparedness and complication readiness among antenatal women attending district hospital in Tumkur, Karnataka, India -*International Journal of Community Medicine and Public Health* Rajesh P et al. *Int J Community Med Public Health.* 2016 Apr;3(4):919-924
- [10] Dr. (Mrs) NilimaR.Bhore " A study to assess the effect of Pineapple extract on Episiotomy wound healing among post natal mothers in selected hospitals of Sangli, Miraj, Kupwad corporation area", *Indian Journal of Public Health research & Development*, Volume 10, No. 7, July 2019.
- [11] Pervin J, Nu UT, Rahman AMQ, Rahman M, Uddin B, Razzaque A, et al. (2018) Level and determinants of birth preparedness and complication readiness among pregnant women: A cross sectional study in a rural area in Bangladesh. *-PLoS ONE* 13(12): e0209076. <https://doi.org/10.1371/journal.pone.0209076>

- [12] Dr. (Mrs) NilimaR.Bhore “ A study to assess the effectiveness of cranberry juice on urinary tract infection among post-natal mothers in selected hospitals” International journal of recent trends in science & technology , April 2018; 26(2):60-63
- [13] Dr. (Mrs) NilimaR.Bhore “ A study to assess the effectiveness of cranberry juice on urinary tract infection among post-natal mothers in selected hospitals” International journal of recent trends in science & technology , April 2018; 26(2):60-63
- [14] PrativaDhakal, MangalaShrestha - Knowledge on birth preparedness and complication readiness in Eastern Region of Nepal - International Journal of Nursing and Midwifery- Vol. 8(10), pp. 75-80, December 2016 DOI: 10.5897/IJNM2016.0241 Article Number: 7DC851062115 ISSN 2141-2456 December, 2016
- [15] Dr. (Mrs) NilimaR.Bhore“ Breast self Examination a Boon to womanhood” in Global Journal for Research Analysis, Volume-8, Issue 4, April 2019.
- [16] Goli S, Nawal D – Plos One – Birth Preparedness and Its Effect on Place of Delivery and Post Natal Check Ups in Nepal – May 2015
- [17] Dr. (Mrs) NilimaR.Bhore“ A study to assess the effect of back massage on let down reflex among mothers undergone cesarean section” in International journal of science & research(IJSR) in March 2016.
- [18] MokeMagoma, Jennifer Requejo, Oona Campbell, Simon Cousens, Mario Merialdi and Veronique Filippi - The effectiveness of birth plans in increasing use of skilled care at delivery and postnatal care in rural Tanzania: a cluster randomised trial - Tropical Medicine and International Health doi:10.1111/tmi.12069 volume 18 no 4 pp 435–443 april 2016
- [19] Dr. (Mrs) NilimaR.Bhore“ A study to assess the effectiveness of selected aspects of Lamez method on pain among primi gravida mothers during first stage of labour in selected hospitals of Sangli, International Journal of Recent Scientific Research, Vol. 7, Issue, 10, pp. 13547-13550, October, 2016
- [20] Mrs. Lily Podder (2015) - “A Study To Assess The Effectiveness Of A Video Assisted Child Birth Education Programme On Knowledge, Intra-Partum Behaviour, Maternal And Foetal Outcome Among Primigravida Mothers In Selected Hospitals Of Pune City” - International Journal of Recent Scientific Research Vol. 7, Issue 10, pp.13948-13954, October, 2016.
- [21] .Dr. (Mrs) NilimaR.Bhore“Effectiveness of self-instructional module regarding reproductive health on knowledge and self-reported practices among adolescent blind students of Western Maharashtra, India” in Journal of Emerging Technologies and Innovative Research, Vol-6 issue-6 pg no. 485-498. June 2019 (ISSN:2349-5162)
- [22] Anjali PushkarTiwari, Anil Sharma, JogindraVati - Effectiveness of self-developed informational booklet regarding birth preparedness and complication readiness (BPCR) on knowledge of antenatal women and assessment of competencies of ASHAs regarding BPCR-A pilot study - Indian Journal of Obstetrics and Gynecology Research , October - December, 2018;5(4): 442: 446