



**“EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE REGARDING BIRTH PREPAREDNESS AND COMPLICATION READINESS AMONG PRIMIGRAVIDAE ATTENDING ANTENATAL OUTPATIENT DEPARTMENT IN SELECTED MATERNITY HOSPITALS AT BENGALURU”.**

**Kavitha L. A.\*<sup>1</sup> and Dr. Pushpaveni N. P.<sup>2</sup>**

<sup>1</sup>M.sc (N) 2<sup>nd</sup> Year in OBG, Govt. College of Nursing, Fort Bengaluru.

<sup>2</sup>Govt. College of Nursing, BMCRI, Bangalore- Karnataka.

**Corresponding Author: Kavitha L. A.**

M.sc (N) 2<sup>nd</sup> Year in OBG, Govt. College of Nursing, Fort Bengaluru.

Article Received on 11/08/2020

Article Revised on 01/09/2020

Article Accepted on 22/09/2020

**ABSTRACT**

Every pregnancy is a joyful moment for all mothers who dream of a safe pregnancy and a healthy baby. However, every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant. Birth preparedness and complication readiness (BPCR) is a strategy that encourages pregnant women, their families, and communities to effectively plan for births and deal with emergencies. A study was conducted to know the effectiveness of video assisted teaching on knowledge regarding BPCR. Method: Pre-experimental design, with Non probability convenient sampling method was used. Information was collected from 50 primigravidae BPCR using the structured interview schedule. Pre-test was conducted, VAT was implemented and post-test was conducted after 7 days of pre-test to find the effectiveness of VAT on knowledge regarding BPCR. Result: Overall mean % of pre-test knowledge regarding BPCR is 38.5%. Classification of respondents on pre-test in which majority 80% (< 50% score) of respondents had inadequate knowledge, 10% (50-75% score) of respondents had moderately adequate, 0% (> 75% score) of respondents had adequate knowledge. Overall mean % of post-test knowledge regarding birth preparedness and complication readiness is 89.35%. Classification of respondent by post-test shows majority of 100% (>75%) of respondents were having adequate knowledge, 0% (< 50% and 50-75%) of respondents were having inadequate and moderately adequate knowledge. Hence the research hypothesis H<sub>1</sub> which was stated that there will be a significant improvement in the level of knowledge among primigravidae regarding BPCR after VAT than before VAT at 0.05 level of significance was accepted. Interpretation And Conclusion: The aim of the study was to assess the effectiveness of video assisted teaching on knowledge regarding BPCR among primigravidae. Thus the study result revealed significant association between post-test and knowledge of primigravidae regarding BPCR.

**KEYWORDS:** Effectiveness, video assisted teaching, BPCR, primigravidae.

**INTRODUCTION AND BACKGROUND**

Birth Preparedness and Complication Readiness (BPCR) is an intervention included by WHO as an essential element of the antenatal care package. It is often delivered to the pregnant women by the health care provider in antenatal care or initiated or followed up through a visit to the home of the pregnant woman by a community health worker. In addition to working with an individual pregnant woman, programme often address efforts to her family and to the broader community to increase awareness on BPCR or to improve health workers' skills to provide BPCR as part of antenatal care. Programme often provide education materials or other visual aids with BPCR information, or may implement mass media campaigns with BPCR

messages.<sup>[1]</sup>

A birth preparedness and complications readiness plan contains the following elements: the desired place of birth; the preferred birth attendant; the location of the closest facility for birth and in case of a complication; funds for any expenses related to birth and in case of complications; supplies and materials necessary to bring to the facility; an identified labor and birth companion; an identified support to look after the home and other children while the woman is away; transport to a facility for birth or in the case of a complication; and the identification of compatible blood donor in case of emergency.<sup>[2]</sup>

To be able to be prepared for birth and possible

complications, women, families and communities need to know about signs of onset labor as well as danger signs during pregnancy and after birth for the woman and newborn. BPCR interventions have evolved and while originally programme focused largely on care seeking for the woman, in recent years, programme have recognized the value of discussing care-seeking for newborn complication. This recommendation was published within the 2015 WHO guideline “WHO recommendations on health promotion interventions for maternal and newborn health.”<sup>[3]</sup>

The principle and practice of Birth Preparedness and Complication Readiness (BP/CR) in a third world setting where there is prevailing illiteracy, inefficient infrastructure, poor transport system, and unpredictable access to skilled care provider have the potential of reducing the existing high maternal and neonatal morbidity and mortality rates. BP/CR promotes skilled care for all births and encourages decision making before the onset of labor.<sup>[4]</sup>

The BP/CR matrix raises awareness of danger signs, thereby improving problem recognition and reducing delay in deciding to seek care.<sup>[5]</sup>

It provides information on appropriate sources of care (promoters and facilities) making the care-seeking process more efficient. It also encourages households and communities to set aside money for transport and service fees, avoiding delay in reaching care caused by the search for funds. However, antenatal care in Nigeria is provided along the lines of the traditional approach based on risk assessment and not on the goal-oriented interventions of focused antenatal care, which include BP/CR. The study is a needs assessment designed to determine the level of awareness, attitude and behavior of women to birth preparedness and complication readiness.<sup>[6]</sup>

Apart from medical causes, there are numerous interrelated sociocultural factors which delay care-seeking and contribute to these deaths. Care-seeking is delayed because of the delay in (a) identifying the complication (b) deciding to seek care (c) identifying and reaching a health facility and (d) receiving adequate and appropriate treatment at the health facility.<sup>[7]</sup>

### The Objectives Of The Study

1. To assess the existing knowledge regarding Birth Preparedness and Complication readiness among primigravidae attending antenatal outpatient department of selected maternity hospitals.
2. To evaluate the effectiveness of video assisted teaching regarding Birth Preparedness and Complication Readiness among primigravidae attending antenatal outpatient department of selected maternity hospitals.
3. To find an association between pre-test knowledge scores of primigravidae regarding Birth Preparedness

and Complication Readiness with selected socio demographic variables.

### Hypotheses

**H<sub>1</sub>:** There will be a significant increase in the mean post-test knowledge scores regarding Birth Preparedness and Complication Readiness among primigravidae attending antenatal outpatient department of selected maternity hospitals.

**H<sub>2</sub>:** There will be a significant association between post-test knowledge scores regarding Birth Preparedness and Complication Readiness with socio- demographic variables of primigravidae attending antenatal outpatient department of selected maternity hospitals.

### Assumptions

1. Primigravidae will have some knowledge regarding BPCR.
2. Video assisted teaching can increase the knowledge of Primigravidae regarding BPCR

### Variables of The Study

1. **Independent Variable:** video- assisted teaching on Birth Preparedness and Complication Readiness for primigravidae.
2. **Dependent Variable:-** Knowledge of primigravidae regarding Birth Preparedness and Complication Readiness.
3. **Socio-Demographic Variables:-** Age, religion, educational status, occupation, monthly family income, type of family, Gestational age, consanguineous marriage, family history hypertension, family history of diabetes.

### Delimitation

1. The study is limited to primigravidae who are between 10weeks- 36 week of gestation attending antenatal outpatient department(OPD) in selected maternity hospitals.
2. The study is conducted in the duration of 4 weeks.

### Conceptual Framework

The conceptual framework of the study parameter is based on Wiedenbachs Helping Art of Clinical Nursing Model( 1964). The study was aimed at developing and evaluating the effectiveness of Video assisted teaching on knowledge regarding BPCR. According to Wiedenbachs adequate knowledge about BPCR improves the health of the mother and have positive labor outcome.

### Methodology

#### Research approach and design

An experimental research approach was adopted and pre experimental with one group pre-test and post-test design was used for this study. Study was conducted in Lakkur PHC. The primigravidae were selected from antenatal OPD of Lakkur PHC. Fifty primigravidae were selected by convenient sampling technique.

### Criteria for Selection of Samples

#### Inclusion criteria

1. Primigravidae those who are 10weeks- 36weeks of gestation attending antenatal outpatient department,
2. Primigravidae who are willing to participate in the study.
3. Prmigravidae who are available at the time of data collection.

#### Exclusive criteria

Primigravidae who are not willing to participate in the study

#### Tool used for the study

A structured interview schedule and video assisted teaching material were prepared to collect the data to achieve objectives of the study. The tool was developed by the investigator after reviewing the related literature and guidance from the experts in the field.

In the present study following tool was used it consists of two parts.

#### Part -1:-Sociodemographic Data

This tool was conducted by investigator. It contained 10 items for obtaining information regarding age, religion, educational status, occupation, type of family, monthly family income, weeks of gestation, consanguineous marriage, family history of hypertension, family history diabetes.

#### Part- 2:- Consists of three sections

##### Section 1:- General information about pregnancy.

In this section consists of 8 knowledge items. Each question has 4 responses in which 1 correct response and 3 distracters. Score 1 was given for correct response for a single question and score 0 was given for wrong

response. The total number of responses were 8, giving rise to maximum score of 8.

##### Section 2:- Birth Preparedness.

In this section consists of 23 knowledge items. Each question has 4 responses in which 1 correct response and 3 distracters. Score 1 was given for correct response for a single question and score 0 was given for wrong response. The total number of responses were 23, giving rise to maximum score of 23.

##### Section 3:- Complication Readiness

In this section consists of 9 knowledge items. Each question has 4 responses in which 1 correct response and 3 distracters. Score 1 was given for correct response for a single question and score 0 was given for wrong response. The total number of responses were 9, giving rise to maximum score of 9.

#### Procedure for data collection

Formal administrative permission was obtained from the Medical Officer of PHC Lakkur and written consent was taken from the subjects. Socio – demographic data was collected from subjects through structured interview schedule. The pre- test was conducted among primigravidae to assess the pre- test knowledge level regarding BPCR. The facility for video screening of the teaching was arranged in the comfortable room. Videos were projected with step by step explanation regarding General information about pregnancy, Birth preparedness, Complication readiness. Video Assisted Teaching was screened through projector for 45 minutes. After one week Post test was conducted to assess the knowledge of subjects regarding BPCR through the same structured interview schedule which was used for pre-test.

**Table 1: Aspect wise mean pre-test and post-test knowledge scores regarding BPCR.**

Aspects of Knowledge	Respondents Knowledge						Paired „t“ Test
	Pre test		Post Test		Enhancement		
	Mean	SD	Mean	SD	Mean	SD(SE)	
Section A	3.12	1.56	7.68	0.55	4.56	1.45(0.20)	22.313
Section B	8.56	2.90	20.16	1.15	11.60	2.54(0.36)	32.300
Section C	3.72	1.36	7.86	1.11	4.41	1.69(0.24)	17.318
Total	15.40	4.21	35.74	1.77	20.34	3.03(0.43)	47.501

\*Significant at 0.05 Level, t (0.05, 49df) =2.0

**Table 2: Overall knowledge regarding BPCR.**

Knowledge	Mean	SD	Paired „t“
Pre	15.40	4.21	47.501
Post	35.74	1.77	
Enhancement	20.34	3.03	

\*Significant at 0.05 Level, t (0.05, 49df) =2.01

**Table 3:-Classification of subjects regarding knowledge on BPCR.**

Knowledge level	Category	Classification of subjects			
		Pre test		Post test	
		Number	Percent	Number	Percent
Inadequate	< 50%	40	80	00	00
Moderate	51-75%	10	20	00	00
Adequate	> 75%	00	00	50	100
Total		50	100	50	100

**Table 4: Association between socio-demographic and knowledge regarding BPCR.**

Characteristics	Group	Median and Less	More than Median	Chi Square Value	P
Age	<=20 Years	08	03		
	21 to 25 Years	14	12	7.027	0.071
	26 to 30 Years	03	07		DF=3,NS
	>30 Years	00	03		
Religion	Hindu	21	21		
	Muslim	04	02	2.667	0.264
	Christian	00	02		DF=2,NS
Education	Primary	03	02		
	Middle	07	00	9.001	0.029
	Higher	04	05		DF=3,NS
	PUC and above	11	18		
Occupation	Home Maker	25	23	2.083	0.149
	Private	00	02		DF=1,NS
Family type	Nuclear	09	12	0.739	0.390
	Joint	16	13		DF=1,NS
Income	<=10000	12	04		
	10000 to 20000	09	21	12.800	0.002
	>20000	04	00		DF=2,S
Gestational Age	<20 Weeks	06	10		
	20 to 28 Weeks	14	11	1.471	0.479
	29 to 36 Weeks	5	4		DF=2,NS
Consanguineous marriage	Yes	08	04	1.754	0.185
	No	17	21		DF=1,NS
Hypertension	Yes	07	03	2.000	0.157
	No	18	22		DF=1,NS
Diabetes	Yes	06	05	0.117	0.733
	No	19	20		DF=1,NS

**Findings of the study**

Overall mean % pre-test knowledge regarding BPCR is 38.5%. Classification of respondents on pre-test in which majority 80% (< 50% score) of respondents had inadequate knowledge, 10% (50-75% score) of respondents had moderately adequate, 0% (> 75% score) of respondents had adequate knowledge.

Overall mean % of post-test knowledge regarding birth preparedness and complication readiness is 89.35%. Classification of respondent by post-test shows majority of 100% (>75%) of respondents were having adequate knowledge, 0% (< 50% and 50-75%) of respondents were having inadequate and moderately adequate knowledge.

Hence the research hypothesis  $H_1$  which was stated that there will be a significant improvement in the level of

knowledge among primigravidae regarding BPCR after VAT than before VAT at 0.05 level of significance was accepted.

The obtained value is less than table value in relation to the age, religion, occupation, type of family, weeks of gestation, educational status, consanguineous marriage, history of hypertension, history of diabetes at 0.05 level of significance. Hence hypothesis  $H_2$  is rejected.

In relation to the monthly family income the obtained value more than table value at level of significance. Hence hypothesis  $H_2$  accepted.

A community based cross sectional study was conducted in Goba woreda, Oromia region, Ethiopia. Multistage sampling was employed. The vast majority of women were not knowledgeable about birth preparedness and

complication readiness. residence, educational status, ANC follow up, knowledge of key danger signs during pregnancy and the postpartum period were independent predictors of birth preparedness and complication readiness.<sup>[8]</sup>

Pre-experimental approach with one group pre-test - post-test design was adopted to accomplish the objectives. The present study revealed that the mothers have lack of knowledge on prevention and management of child abuse and the overall findings of the study proved that there was a highly significant increase in the knowledge of the mothers on prevention and management of child abuse following the administration of the VATP. Therefore it was concluded that the VATP was highly effective in improving the knowledge of the mothers on prevention and management of child abuse.<sup>[9]</sup>

## CONCLUSION

The pre-test knowledge score among majority primigravidae was inadequate and post - test knowledge score found adequate. There was significant enhancement in knowledge of primigravidae after conducting video assisted teaching on BPCR. Hence the research hypothesis H<sub>1</sub> which was stated that there will be a significant improvement in the level of knowledge among primigravidae regarding BPCR after VAT than before VAT at 0.05 level of significance was accepted. The obtained value is less than table value in relation to the age, religion, occupation, type of family, weeks of gestation, educational status, consanguineous marriage, history of hypertension, history of diabetes at 0.05 level of significance. Hence hypothesis H<sub>2</sub> is rejected. In relation to the monthly family income the obtained value more than table value at 0.05 level of significance. Hence hypothesis H<sub>2</sub> accepted.

## RECOMMENDATIONS

- A similar type of study can be conducted in a larger population.
- A similar study can be conducted in different setting.
- A comparative study can be done between the effects of structured teaching programme versus video assisted teaching programme.
- A study may be done to explore the attitude and practice of adults regarding BPCR.
- A study can be conducted among staff nurses who are working in the hospitals.

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