

A Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Evidence Based Practice in Labour Practices Among Final Year Bsc Nursing Students at Selected College of Nursing, Mysuru

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ABSTRACT

Pregnancy-related complications are the second global leading cause of death among women of reproductive age. In 2015, approximately 3,03,000 maternal deaths occurred worldwide, most of which could have been prevented. The application of evidence-based practices in labour at maternity units has shown changes in pregnancy and labour outcomes, hence the researcher undertaken this study.

Methods: The research approach adopted for the present study was pre-experimental one group pre-test post-test research design. The 60 samples were selected by nonprobability purposive sampling technique. The self-structured knowledge questionnaires were used to gather the data. The data was analyzed by using the descriptive and inferential statistics.

Result: In the pre-test the overall mean percentage of knowledge score was 50.66% with mean and SD of 15.20 ± 1.48 and in post-test the mean percentage of post-test knowledge was 91.76% with mean and SD of 27.53 ± 1.17 . The mean difference was 12.33 with SD of 1.90. The calculated paired 't' test value was 50.24 at the degree of freedom 59, the p value was 0.0001. There was no significant association between the demographic variables with pretest knowledge score.

Interpretation and Conclusion: The video assisted teaching program was effective in enhancing the knowledge of the samples regarding evidence-based practices in labor. The study recommends to conduct a study on use of evidence-based practices among staff nurses in labor room.

Keywords: labour, evidence-based practices, knowledge, video assisted program.

INTRODUCTION

'Childbirth is more admirable than conquest, more amazing than self-defense and as courageous as either one'

-Gloria Steinem

Labour is a process, where women give birth to the child. The most wonderful moment in women's life is during labour, as most women and their families experience greatest excitement during labour. The anticipated period of uncertainty, anxiety, and fear, ends with beautiful birth of the baby. Clearly, the support and care they receive during this time is critical. Thus, the overall aim of caring for women during labour and birth is to engender, a positive experience for the women and her family, while maintaining their health preventing complications and responding to emergencies.¹

Effective maternity care with least harm is optimal for childbearing women and newborns. High-quality systematic reviews of the best available research provide the most trustworthy knowledge about beneficial and harmful effects of health interventions in large part because of differences in practice style and other extrinsic factors rather than differences in needs of women and newborns. The gaps between actual practice and lessons from the best evidence reveal tremendous opportunities to improve the structure, process, and outcomes of maternity care for women and babies and to obtain greater value for investments.²

Evidenced-based maternity care and birth are policies and procedures based on proven scientific evidence from medical research and peer-reviewed journals. It is the practice of effective care with the least amount of harm. Unfortunately, in many parts of the world, standard hospital care is not practiced in this way. In fact, many hospital procedures go in direct contrast to recent medical evidence and increase the risks for healthy mothers.²

Recent epidemiological evidence from a range of developing countries suggests that skilled care during childbirth may help to prevent maternal deaths. As for which, the nursing education has undergone major transformation along with the change in concept of health and disease. Partograph is basically a graphic representation of the events of labour plotted against time in hours. It consists of three components that is monitoring and managing of foetal condition, maternal condition, progress of labour.³

The maternity care that involves a midwife as the main care provider leads to several positive outcomes with no adverse effects for both mother and babies. In countries like United Kingdom and Australia, Midwives represent the main providers of care for women during pregnancy, labour, and birth. In Midwife led care, the emphasis is on normality, continuity of care and being cared for by a known, trusted midwife during labour.⁴

Standard care in hospitals can be intervention-intensive, continuous electronic foetal monitoring, epidurals, restricting food and drink, restricting movement, and having mothers push in the supine position all increase stress to the mother and baby, disrupt the natural flow of hormones, and may lead to complications. Nursing research, emphasis was placed on the use of evidence from clinical research to rationalize clinical nursing interventions. However, current barriers in research utilization can present a challenge to nurses in using evidence base d practice to guide clinical practice.⁵

The study on the Current intrapartum care practices in India. The findings of the study demonstrated that providing lithotomy position at the time of delivery and giving episiotomy to all primigravida mothers were highly practiced during intrapartum care. Care providers believe that episiotomy has more benefits over perineal laceration, such as easy wound healing, prevention of deep perineal lacerations, easy to deliver the baby, mother experiences less pain, and there are less chances of hematoma formation. Maternity care providers from government and non-government hospitals had significant differences in their opinion towards conducting episiotomies for all deliveries and to all primigravida's The study

findings suggested that self-reported practices of maternity care providers reflect a big gap in the utilization of evidence-based practices.⁶

A study in Uttar Pradesh indicated that the adherence to WHO safe Childbirth Checklist (SCC). Adherence to individual practices, containing supply preparation and direct provider care, varied widely (0.51 to 99.78%). Its data was recorded 166 perinatal deaths (50.71 per 1000 births), including 56 (17.1 per 1000) stillbirths. Each additional practice performed was significantly associated with reduced odds of perinatal and early neonatal mortality.⁷

NEED FOR STUDY

In maternal health care there is a recognized gap between evidence of effectiveness and clinical practice. Indeed, too often routine care is not evidence based and there is strong resistance to stopping harmful or useless procedures. Unnecessary caesarean section and episiotomy are good examples of the mismatch between evidence-based practice and of the complexities that change entails.⁹

Global observation shows that more than 50 million women suffer from a serious pregnancy related illness or disability. At least 1.2 million newborn infants die due to inadequate and unskilled care that they receive during delivery, and it is estimated that every year more than 585,000 women die Worldwide from pregnancy and childbirth related complications.²

The woman in labour requires a continuous support by Health care professionals who play a significant role in achieving beneficial maternal outcome. Thus, the global safe motherhood initiative was launched in 1987 to address this major health problem .the initiative, led by the safe motherhood inter-agency group (IAG) works to raise awareness and stimulate action at the global and national levels to make pregnancy safer for women. Current data indicates that only 53% of women in developing countries deliver with a skilled health care provider present. To improve this situation, the inter-agency group as developed a multi -step strategy which includes conducting of workshops for student nurses. Thus, the student nurses also play a major role in providing care to women in labour, by their prompt assessment and observation skills.¹⁰

To cap it all Evidence Based Nursing care is lifelong approach to clinical decision making and excellence in practice. Evidence Based nursing care is informed by research findings, clinical expertise and patient's values and its use can improve patients' outcomes. Use of research evidence in clinical practice is an expected standard of practice for students, by using these levels of evidence-based practices in labour practices students can determine the strength of research studies to assess the findings and evaluate the evidence for potential implementation into best practice. This article provides a pragmatic definition of Evidence based practice to develop in the nursing division, theoretically divan randomized controlled trails are urgently needed to test the effectiveness of intervention on advancing evidence-based care.

OBJECTIVES OF THE STUDY ARE

- To assess the existing knowledge regarding evidence-based practice in labour practices among final year B.Sc. Nursing students in selected college of nursing, Mysuru.
- To determine the effectiveness of Video assisted teaching programme on knowledge regarding evidence-based practice in labour practices among final year B.Sc. Nursing students in selected College of Nursing, Mysuru

- To find the association of pre-test level of knowledge on evidence-based practice in labour practices with selected demographic variables

HYPOTHESIS

- **H₁:** There will be difference between mean pretest and posttest knowledge score of the final year B.Sc. Nursing students regarding evidence-based practice in labour practices.
- **H₂:** There will be significant association between pre-test level of knowledge regarding evidence-based practice in labour practices with their selected demographic variables of final year B.Sc. Nursing Students.

4. METHODOLOGY

RESEARCH APPROACH

Research approach is a systematic, controlled, empirical and critical investigation of natural phenomena guided by theory and hypotheses about the presumed relations among such phenomena.

In view of the nature of the problem under study and to accomplish the objectives of the study, quantitative evaluative approach was used. The quantitative evaluative design is an applied form of research that involves finding out how well a program, procedure or policy is working and its goal to assess or evaluate the success of a program.

RESEARCH DESIGN

Research design is the researcher’s overall plan for obtaining answers to the research questions or for testing the research hypothesis. It is the plan for addressing a research question including specialization for enhancing the integrity of the study.

Quantitative research method is a formal, objective, systematic process in which numerical data are used to obtain information. Pre-experimental method with one group pre-test post-test design was selected for the study.

This can be represented as,

GROUP	PRE-TEST KNOWLEDGE	INTERVENTION	POST-TEST KNOWLEDGE
S	O ₁	X	O ₂
Final year nursing students (60)	Administration of structured knowledge questionnaire	Administration of video assisted teaching programme	Administration of structured knowledge questionnaire

S= Single Group O₁ = Pretest X= Intervention O₂ =Posttest

POPULATION

Population means all possible elements that could be included in research. It represents the entire group under study. Target population is the total group of subjects about whom the investigator is interested, and the result would be reasonably generalized. The accessible population is the population of subjects available for study.

The population selected for the study comprised of all final year B.Sc. Nursing students from selected Gopala Gowda Shanthaveri Memorial College of Nursing, Mysuru. and accessible population consists

of final year B.Sc. nursing students, Mysuru, who met the inclusion criteria.

SAMPLING PROCEDURE

Sample and sample size

A finite subset of the population selected from it with the objective of investigating its properties is called a sample. The sample of the study would comprise of 60 final year B.Sc. Nursing students in Gopala Gowda Shanthaveri Memorial College of Nursing, Mysuru. who fulfilling inclusion criteria.

Sampling technique

Sampling is a process of selecting a group of people, events or portion of the population to represent the entire population. In non-probability purposive sampling technique was used to select 60 final year BSc nursing students

Data collection technique:

Selection and development of the tool

An instrument is a device used to measure the concept of interest in a research project. The instrument selected in research, should be as far as possible the vehicle that could best obtain data for drawing conclusions, which were pertinent to the study.

In this study two types of tools were used by the researcher.

Part 1-

The items of demographic characteristics of students comprising of Age in years, gender, religion, educational status, type of family, occupation of father, and OBG clinical posting.

Part 2-

Self-developed structured questionnaire on the knowledge on evidence-based practice in labor room among the final year B.sc nursing Students in selected nursing college in Mysuru.

Description of the tool

Tool is designed to collect relevant information from final year B. Sc Nursing students regarding evidence-based practice in labor room.

Part I: Demographic characteristics - This is designed to elicit the baseline information from respondents consisting of 07 items. Age in years, gender, religion, educational status, type of family, occupation of father, and OBG clinical posting.

Part II: Self-developed structured questionnaire on the knowledge on evidence-based practice in labor among the final year B.sc nursing Students in selected nursing college in Mysuru.

SI No	Score	Level of knowledge
1	0-10	Inadequate Knowledge
2	11-20	Moderate Knowledge
3	21-30	Adequate Knowledge

RESULT

ORGANIZATION OF DATA:

The findings were presented under the following sections.

Section I: Frequency and percentage distribution of selected demographic variables of final year BSc Nursing students.

Section II: Assessment of knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students in pre-test.

Section III: Assessment of knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students in post-test.

Section IV: Comparison of pretest and posttest knowledge scores to determine the effectiveness of video assisted teaching programme.

Section V: Association between the pretest knowledge score with selected demographic variables

Section I- Frequency and percentage distribution of selected socio demographic variables

Table 1: Frequency and percentage distribution samples according to demographic variables of final year B.Sc. Nursing students

n=60

SL. NO.	DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE (%)
1	Age In Years		
	21 years	29	48.3
	22 years	28	46.7
	23 years	03	5.0
2	Gender		
	Male	15	25
	Female	45	75
3	Religion		
	Hindu	26	43.3
	Christian	33	55
	Muslim	01	1.7
4	Educational Status of The Mother		
	Primary education	06	10
	High school	28	46.7
	Degree	26	43.3
5	Type of Family		
	Nuclear family	50	83.3
	Joint family	10	16.7
6	Occupation of the Father		
	Private employee	34	56.7
	Govt. employee	26	43.3
7	OBG Clinical Postings in		
	Private hospitals	60	100
	Govt. Hospitals	00	00
8	Previous Exposure Towards EBP in LB		

	Yes	60	100
9	Source of Information		
	Health professions	43	71.7
	Social Media	17	28.3

Table No 1- describes the frequency and percentage distribution of samples according to their demographic variables. In relation to the age of samples, majority of the samples 29(48.3%) were 21 years of age, 28(46.7%) were 22 years of age and 03(5.0%) were 23 years of age. With regard to the gender, majority 45(75%) were females and 15(25%) were males. In relation to the religion, 33(55%) were Christian, 26(43.3%) were Hindu and 01(1.7%) were Muslim. With regard to educational status of the mother, 28(46.7%) were had high school education, 26(43.3%) were had degree and 06(10%) were had primary education. In relation to the type of family, 50(83.3%) were from nuclear family and 10(16.7%) were from joint family. With regard to the occupation of father, majority 34(56.7%) were from private employee, 26(43.3%) were Govt. employee. In relation to OBG clinical posting in various hospitals, all the samples had clinical posting at private hospitals. With regard to the previous exposure towards EBP in labor ward, all the samples had previous exposure towards EBP in labor ward. The majority of the students 43(71.7%) got from health professionals and social media 17(28.3%) had from social media.

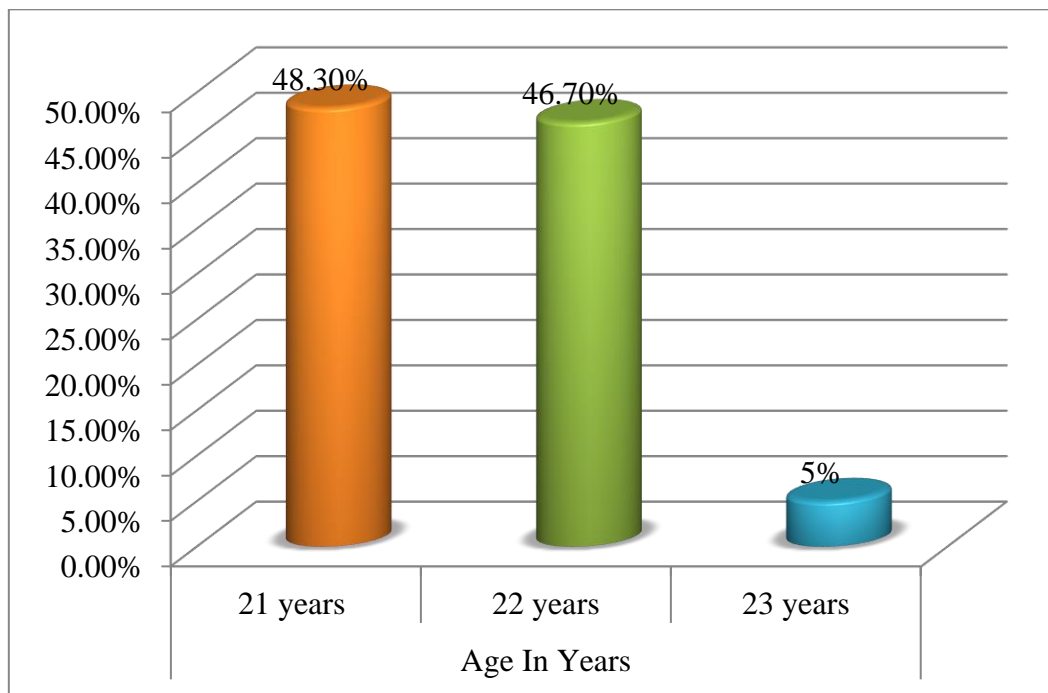


Figure No 3: Percentage distribution of samples according to age in years.

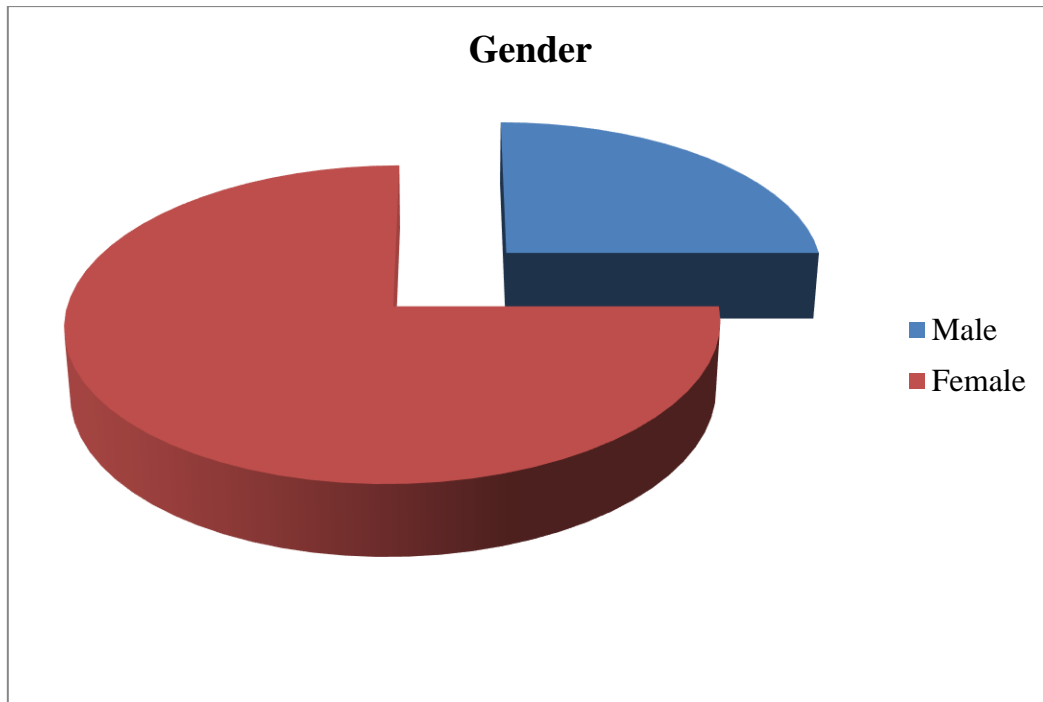


Figure No4: Percentage distribution of samples according to gender.

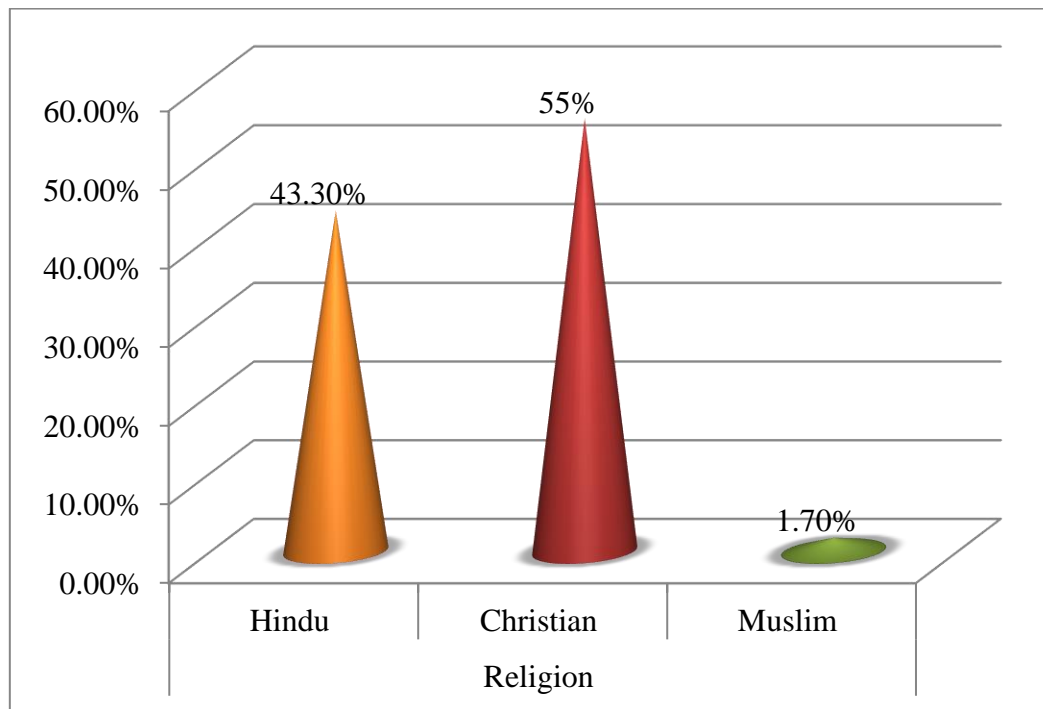


Figure No 5: Percentage distribution of samples according religion

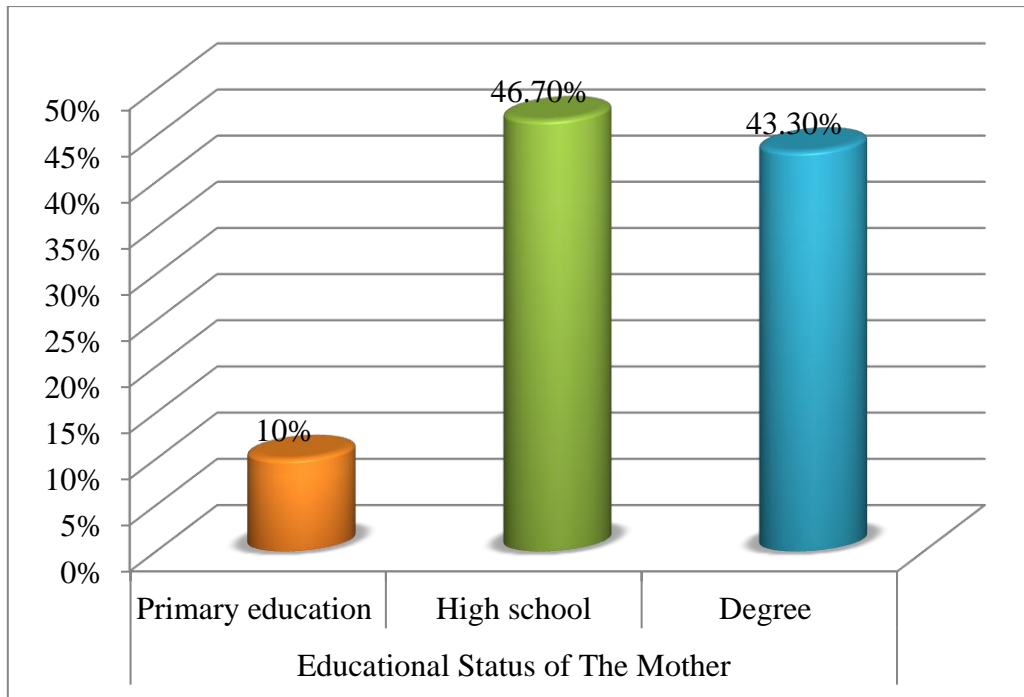


Figure No 6: Percentage distribution of samples according to education status of the mother.

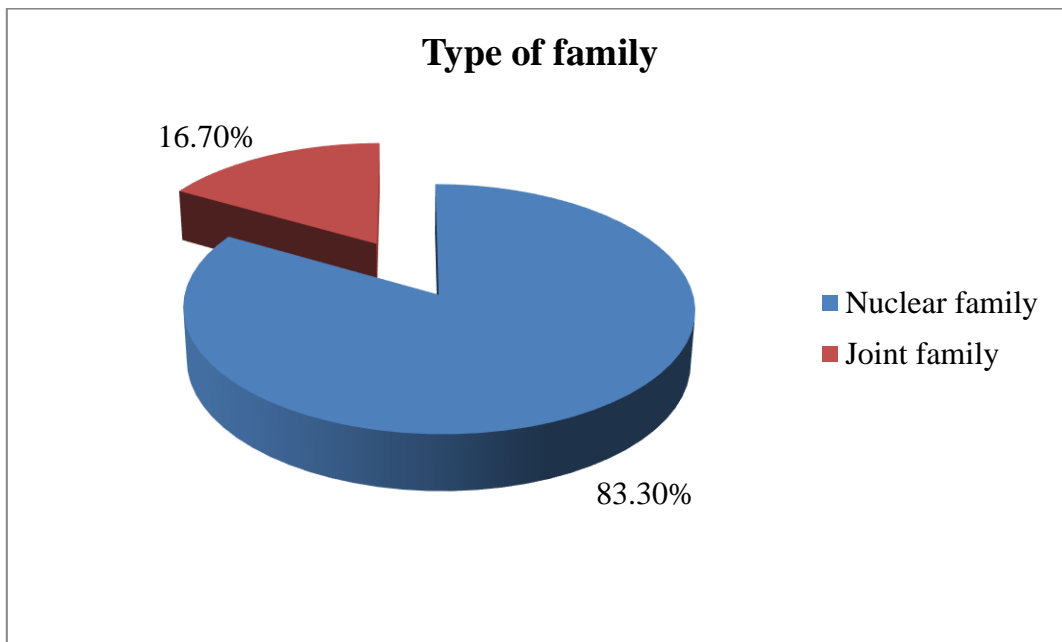


Figure No 7: Percentage distribution of samples according to type of family.



Figure No 8: Percentage distribution of samples according to occupation of the father.

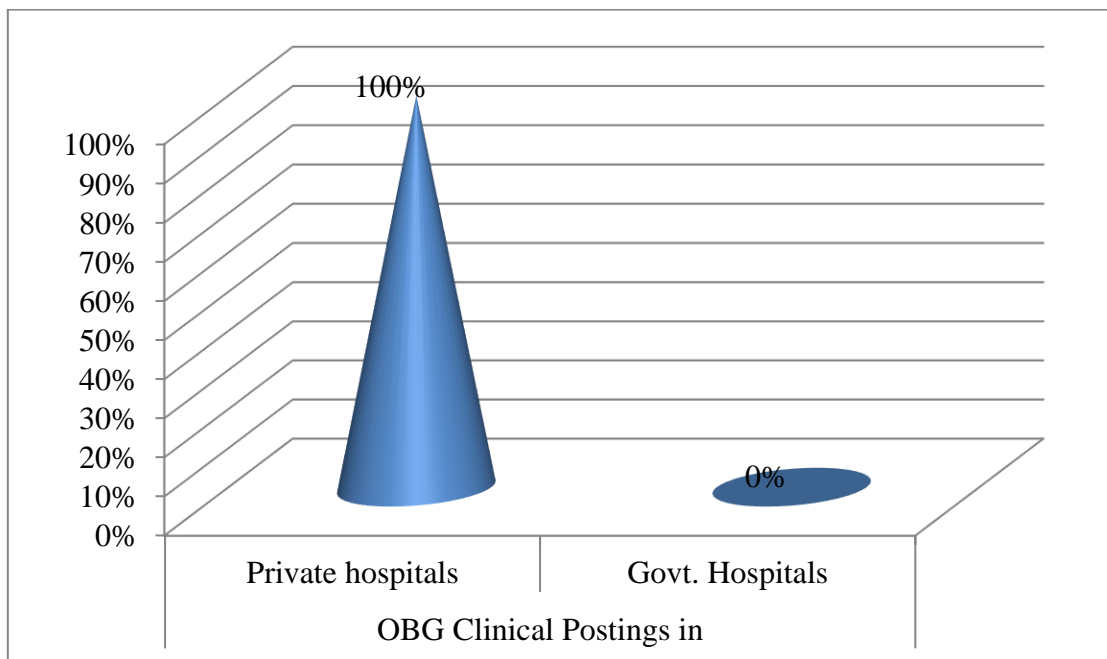


Figure No 9: Percentage distribution of samples according to Clinical postings

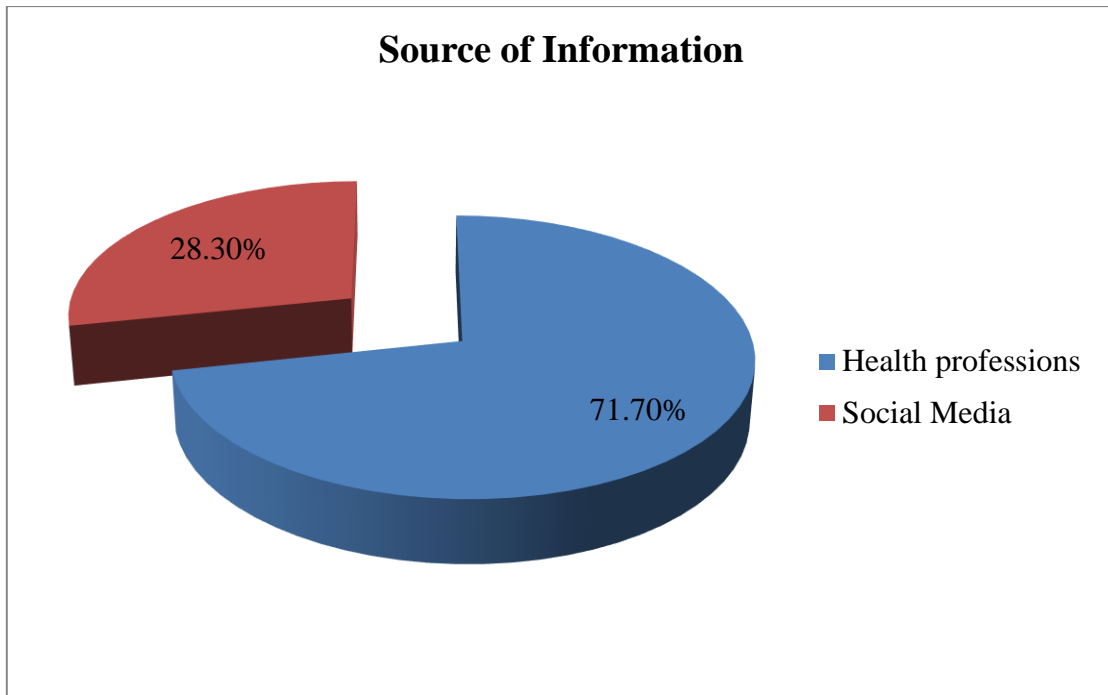


Figure No 10: Percentage distribution of samples according to source of information.

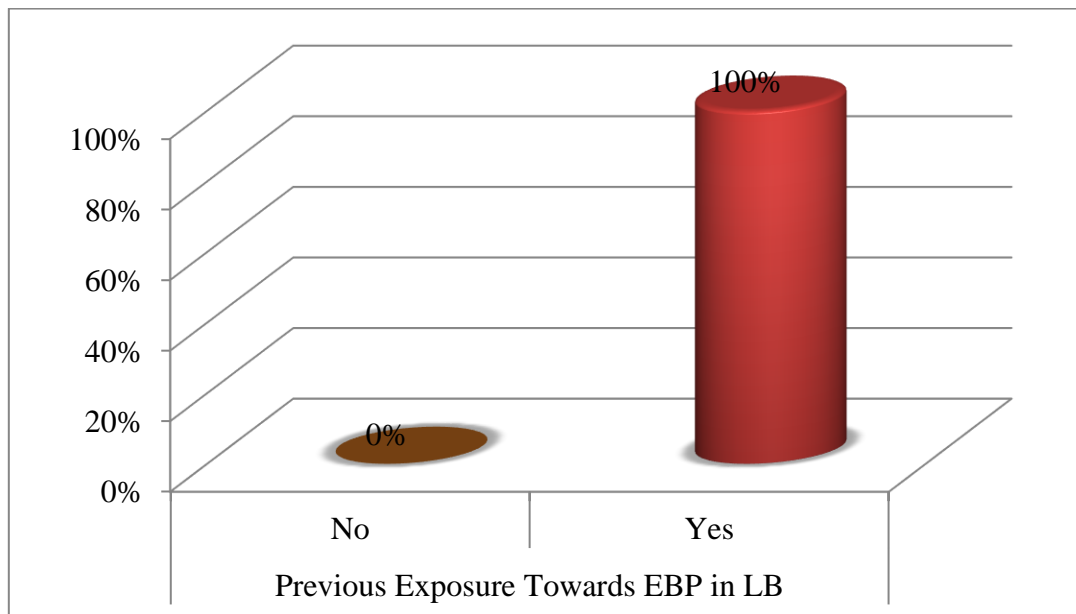


Figure No 11: Percentage distribution of samples according to Previous exposure towards EBP in LP

SECTION- II

Section II: Assessment of knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students in pre-test.

Table 2: Pretest mean, SD and Mean % knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students.

n=60

Knowledge	No of items	Range		Pretest knowledge score			
		Min	Max	Mean	SD	Median	Mean %
Total Knowledge	30	13	19	15.20	1.48	15	50.66%

The data presented in the table shows that in pretest overall knowledge, the mean percentage of knowledge was 50.66% with mean and SD of 15.20±1.48 The range varies between 13-19, and median was 15.

Table No 03: Classification of respondents based on the pre-test levels of knowledge.

n=60

Sl. No	Knowledge	Frequency	Percentage
1	Inadequate Knowledge (Score 0-15)	34	56.67%
2	Moderately Adequate knowledge (Score 16-22)	26	43.33%
3	Adequate knowledge (Score (23-30)	00	00%

The above table describes the classification of samples according to levels of knowledge. In the pre-test ,majority of the samples 34 (56.67%) were had inadequate knowledge, 26(43.33%) were had moderately adequate Knowledge and none of the samples had adequate knowledge.

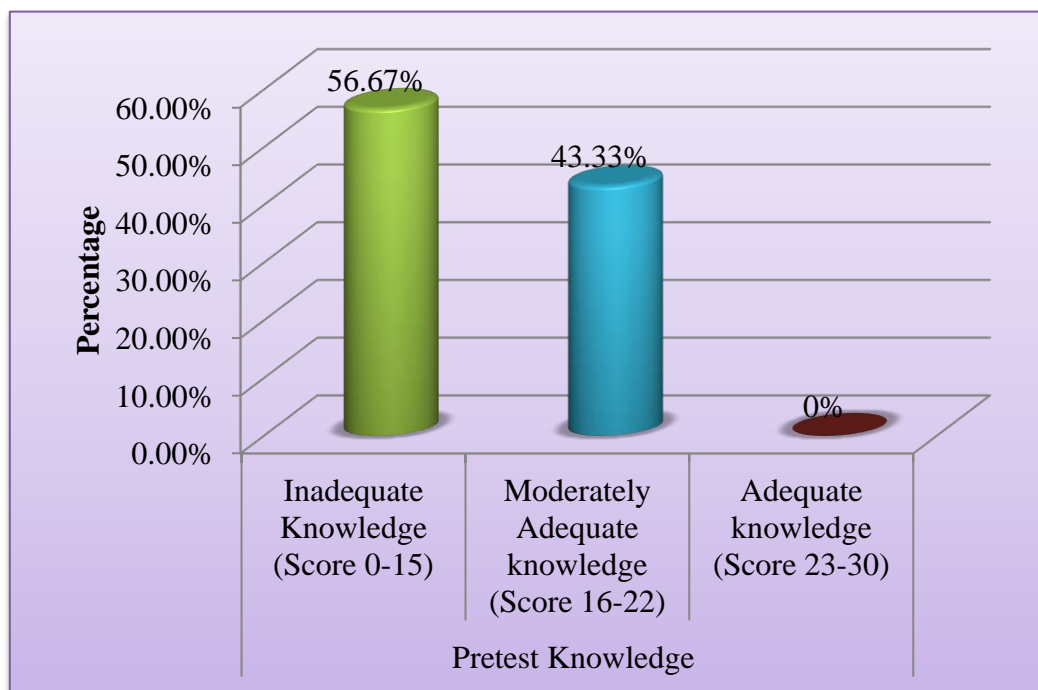


Fig No. 12. Percentage distribution of samples according to pre test levels of knowledge.

Section III: Assessment of knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students in post-test.

Table 4: Posttest mean, SD and Mean % knowledge regarding evidence-based practice in labour practices among final year BSc Nursing students.

n=60

Knowledge	No of items	Range		Post-test knowledge score			
		Min	Max	Mean	SD	Median	Mean %
Total Knowledge	30	25	30	27.53	1.17	28	91.76

The data presented in the table shows that in posttest overall knowledge, the mean percentage of knowledge was 91.76% with mean and SD of 27.53±1.17. The range varies between 25-30, and median was 28.

Table No 05: Classification of respondents based on the posttest levels of knowledge
n=60

Sr. No	Knowledge	Frequency	Percentage
1	Inadequate Knowledge (Score 0-10)	00	00
2	Moderately Adequate knowledge (Score 11-20)	00	00
3	Adequate knowledge (Score 21-30)	60	100

The above table describes that all the samples 60(100%) were had adequate knowledge.

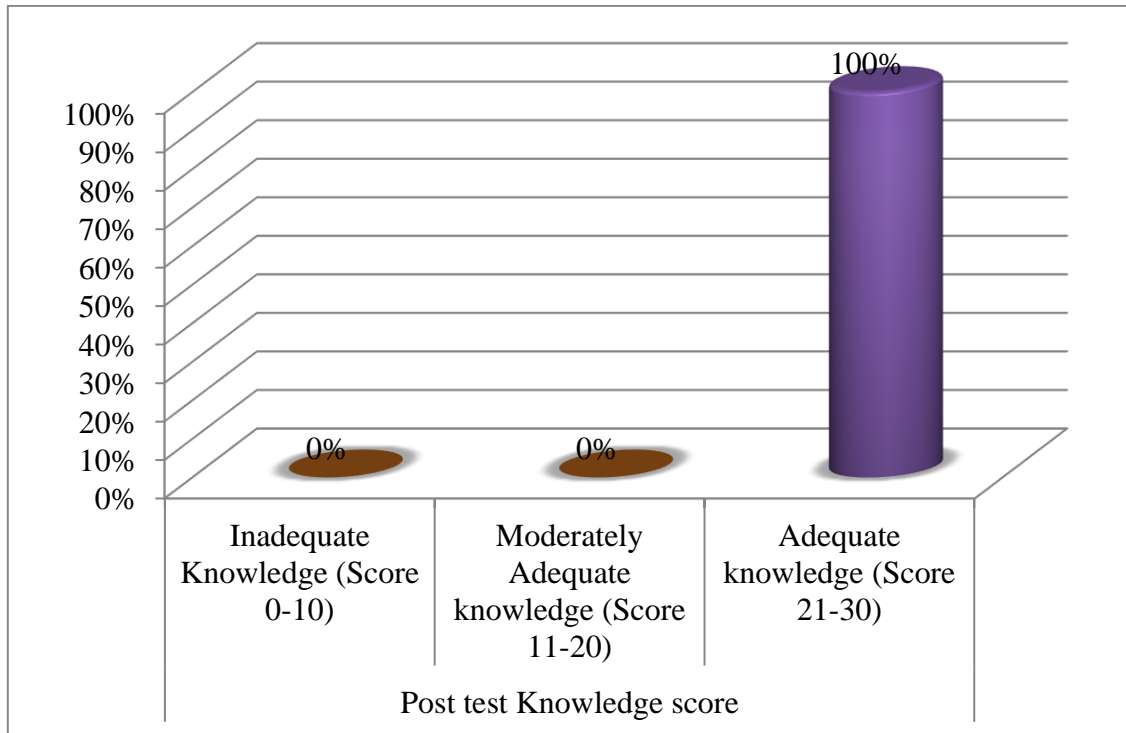


Fig No.13. Percentage distribution of samples according to post test levels of knowledge

Section IV: Comparison of pre-test and post-test knowledge scores to determine the effectiveness of video assisted teaching programme.

Table No.06 comparison of pretest and posttest knowledge score to assess the effectiveness of video assisted teaching program.

n=60

Sr. No	Knowledge	Mean	SD	Mean%	Paired 't 'test
1	Pre-test	15.20	1.48	50.66	50.24, df =59. S*, p=0.0001
2	Post-test	27.53	1.17	91.76	
3	Enhancement	12.33	1.90	41.10	

The above table compares the pretest and posttest knowledge scores. In the pre-test the mean percentage of knowledge was 50.66 with mean and SD of 15.20±1.48 and in the post-test, the mean percentage of knowledge was 91.76 with mean and SD of 27.53±1.17. The mean difference was 12.33 with SD of 1.90. The calculated paired t test value was 50.24 at the degree of freedom 59, the p value was 0.0001.

Testing of Hypothesis:

The stated hypothesis is H₁: There will be difference between mean pretest and post-test knowledge score of the final year B.Sc. Nursing students regarding evidence-based practice in labour practices.

The paired t test was used to test the hypothesis, the calculated paired t test value was 50.24 at the degree of freedom 59, the p value was 0.0001, hence the stated hypothesis is accepted at 0.0001 and the structured teaching program was effective

Section V: Association between the between pre-test knowledge score with selected demographic variables.

Table No. 07. Association between the pretest knowledge score with selected demographic variables.

n=60

Sl. No.	Demographic Variable	F	Knowledge Score				Chi Square
			Inadequate		Adequate		
			F(34)	%	F	%	
1	Age In Years						0.1516, p=0.927, df=2, NS
	21 years	29	16	55.17	13	44.83	
	22 years	28	16	57.14	12	42.86	
	23 years	3	2	66.67	1	33.33	
2	Gender						0.90, df=1, p=0.764, NS
	Male	15	9	60.00	6	40.00	
	Female	45	25	55.56	20	44.44	
3	Religion						1.444, df=2, p=0.486, NS
	Hindu	26	20	76.92	6	23.08	
	Christian	33	13	39.39	20	60.61	
	Muslim	1	1	100.00	0	0.00	
4	Educational Status of The Mother						1.584, df=2, p=0.453, NS
	Primary education	6	2	33.33	4	66.67	
	High school	28	16	57.14	12	42.86	
	Degree	26	16	61.54	10	38.46	

5	Type of Family						0.054, df=1, p=0.81, NS
	Nuclear family	50	28	56.00	22	44.00	
	Joint family	10	6	60.00	4	40.00	
6	Occupation of the Father						2.065, df=1, p=0.151, NS
	Private employee	34	22	64.71	12	35.29	
	Govt. employee	26	12	46.15	14	53.85	
7	OBG Clinical Postings in						Cannot be computed.
	Private hospitals	60	34	56.67	26	43.33	
	Govt. Hospitals						
8	Previous Exposure Towards EBP in LB						Chi square cannot be computed.

Conclusion

Majority of the samples 29(48.3%) were in the age group of 21 years of age, 45(75%) were samples were females, 33(55%) samples religion was Christian, majority of samples, 28(46.7%) were had high school education, 50(83.3%) were belongs to nuclear family, majority 34(56.7%) of samples fathers occupation was private employee. In relation to OBG clinical posting in various hospitals, all the samples had clinica posting at private hospitals. All the samples had previous exposure towards EBP in labor ward. The majority of the students 43(71.7%) got information from helath professionals. In the pre-test the overall mean percentage of knowledge score was 50.66% with mean and SD of 15.20±1.48 and in post-test the mean percentage of posttest knowledge was 91.76% with mean and SD of 27.53±1.17. The mean difference was 12.33with SD of 1.90. The calculated paired t test value was 50.24 at the degree of freedom 59, The p value was 0.0001. There was no significant association between the demographic variables with pretest knowledge score.

Recommendations

Keeping the present study in view, following recommendations were made.

- The study can be replicated in large sample for better generalization.
- A comparative study can be conducted on use of two methods of delivery in terms of labor outcomes.
- An experimental study can be conducted using control group.
- A study can be conducted to assess the practices and difficulties faced by the nurses in application of EBP based knowledge in practice.

Limitation of the study

- The study was limited to the 60 samples and on study setting.
- The study was limited to only on knowledge aspect and not included practices
- The student nurses are included.
- The study was limited for the duration of data collection.

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