



Evaluate the Effectiveness of Video Assisted Teaching on Knowledge of Labor Mechanism Among Final Year BSc Nursing Students at Gangothri College of Nursing in Bangalore

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ABSTRACT

The normal labor mechanism is a series of events that occur in the genital organ to allow the birth of a viable fetus at term, followed by the ejection of the placenta and membrane from the vagina. Nursing have an important role in labor process by conducting educative programmes on mechanism of labor in Colleges. This study attempts to evaluate the Effectiveness of Video Assisted Teaching on Knowledge of Labor Mechanism Among Final Year BSc Nursing Students at Gangothri College of Nursing in Bangalore"

Keywords: Final year Bsc nursing students; VAT; Labor mechanism.

Introduction

One of the most beautiful times in a woman's life is during her pregnancy, which is accompanied by feelings of ecstasy and joy as well as hopes and prayers for the baby's health and wellbeing. Occasionally, a variety of illnesses and conditions that could have a detrimental effect on both the pregnant mother and her fetus could make it more challenging. Because of how pregnancy affects them or because of the methods used to treat those diseases, pre-pregnancy disorders are important. The signs or symptoms that put the mother and fetus in a potentially lethal situation are known as warning signals.¹

A fetus and placenta are expelled from the uterus through the vaginal canal during labor. Three stages can be identified in human labor. There are two phases within the first step. Fetal features, pelvic architecture, and maternal efforts and uterine contractions all play a role in a successful labor. Traditionally, these three elements are referred to as the passenger, power, and passage. To keep an eye on labor, clinicians frequently employ several modalities. Serial cervical examinations, commonly referred to as the station, are used to assess cervical dilation, effacement, and fetal position. To monitor the fetal condition throughout labor, fetal cardiac monitoring is almost always used. Cardiotocography is employed to keep track of the regularity and strength of contractions.²

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According to the World Health Organization, "normal labor" is the process of delivering a fetus, placenta, and membranes after starting spontaneously at term (37 complete weeks of gestation) for a fetus with cephalic presentation. Although the exact causes of labor at term are unknown, it is believed that alterations in the hypothalamic-pituitary-adrenal axis, rising fetal cortisol levels, and placental enzymatic processes are to blame. hormone interactions between the uterus, placenta, and fetus are complex. The placenta transforms fetal dehydroepiandrosterone sulfate (DHEAS) into estriol and estradiol.¹ In order to promote uterine contractions, this increases myometrial gap junctions, lowers the progesterone/estrogen ratio, and potentiates oxytocin receptors in the myometrium. A rise in prostaglandin production in the placenta and cervix, which further induces their receptors and facilitates cervical ripening and uterine contractions, is also linked to the beginning of labor.³

As learning outcomes for learners, the main objective that students are expected to achieve as a result of successfully completing the course is made clear to them. It explains how to apply the knowledge and abilities that a person has acquired and may demonstrate as a result of learning outcomes. One of the most important elements of a high-quality education is the body of literature on educational research, which is often referred to as the

effective practice of tracking the learning processes. A crucial factor in differentiating between competent colleges and professors is the careful monitoring of student achievement.

Identify the various teaching styles and use student development as a reliable predictor of academic success. Understanding the mechanism of labor is critical for both academic and clinical obstetrics and gynecology practice. Understanding the complex labor process may be difficult for students. The goal of the video-assisted training was to help students learn and understand the labor process. It is the one that the children require the most for easy recall and memory.

OBJECTIVES

- To measure final-year BSc nursing students' pre-test level of knowledge of labor mechanisms at Gangothri College of Nursing in Bangalore.
- To assess the effectiveness of video-assisted teaching about labor mechanisms among final-year BSc nursing students at Gangothri College of Nursing in Bangalore.
- To investigate the relationship between pre-test knowledge scores about labor mechanisms and selected socio demographic characteristics among final year BSc nursing students at Gangothri College of Nursing in Bangalore.

Hypotheses

H1: There is a strong relationship between mean pretest knowledge scores and post-test knowledge scores of final year B.Sc nursing students in terms of labor mechanism.

H2: The post-test knowledge scores of final-year B.Sc. nursing students understanding the mechanism of labor will significantly correlate with a few socio-demographic factors.

Assumptions

- ✓ Final-year BSc nursing students will have some understanding of labor mechanisms.
- ✓ Video assisted education can improve the quality of treatment by increasing the understanding of final year B.Sc nursing students about labor mechanisms.

Variables of the study

- ✓ Independent variables: Video assisted teaching on mechanism of labour.
- ✓ Dependent variables: Knowledge of final year BSc nursing students regarding mechanism of labour.
- ✓ Socio-demographic variables: Age, fathers and mothers Educational status, Type of family, Religion, fathers and mothers Occupation, family income, and Source of Information regarding mechanism of labour.

Delimitation

The study is confined to 60 final year bachelor of science nursing students at Gangothri College of Nursing in Bangalore.

Methodology

Research approach and design

This study used a quantitative evaluative technique and a pre experimental with one group pre-test and post-test design. The research was carried out at Gangothri college of Nursing in Bangalore. The final year B.Sc nursing students from Gangothri college of Nursing in Bangalore were chosen. Purposive sampling was used to select 60 final-year B.Sc nursing students.

Criteria for selection of samples

Inclusion criteria

- Final year B.Sc Nursing students who are all studying in Gangothri college of nursing Bangalore.
- Final year B.Sc Nursing students who are willing to participate in the study.

Exclusion criteria

- Final year B.Sc Nursing students who are all critically ill.
- Final year B.Sc Nursing students who are not available at the time of data collection.

Tool used for the study

To collect data for the study's aims, a systematic interview schedule and video-assisted instructional material were created. The researcher created the tool after examining related literature and seeking advice from specialists in the field.

Section I: The socio demographic schedule consists of ten items: age, fathers and mothers educational status, family type, religion, fathers and mothers occupation, family income, and source of information on labor mechanism.

Section II: A structured quiz on labor mechanism knowledge consists of ten multiple-choice items.

Section III: There are three parts to video-assisted teaching material. They are as follows: uterine anatomy and physiology, normal pregnancy, and normal labor process.

Procedure for data collection

The principal of Gangothri College of Nursing in Bangalore granted formal administrative approval, and the subjects provided written consent. Subjects' socio-demographic information was gathered through a standardized interview schedule. The pre-test was given to final year B.Sc nursing students to examine their prior understanding of the mechanism of labor.

In the pleasant space, a video display of the teaching was set up. Videos containing step-by-step explanations of the anatomy and physiology of the uterus, normal pregnancy, and typical birthing process were projected. For 45 minutes, video-assisted instruction was shown on a projector.

After one week, a post-test was conducted to measure subjects' understanding of labor mechanisms using the same structured questionnaire that was used for the pre-test.

MAJOR FINDINGS OF THE STUDY

Up to 56 (93.3%) students of Gangothri college of nursing in bangalore's fourth year of the b.sc. nursing program ranged in age from 20 to 21 years old (6.7%). students in gangothri college of nursing in bangalore's fourth year were between the ages of 22 and 23. 22 at most (37%) at gangothri college of nursing in bangalore, 38 (63%) of the fourth-year bsc nursing students are female. 36 (60%) 24 (40%) of the fourth-year b.sc. nursing students at gangothri college of nursing in bangalore came from nuclear families. 42 (70%) of Gangothri College of Nursing Bangalore's 4th year B.Sc Nursing students were from rural areas, while 18 were from urban areas. The educational status of 7 (%) students' fathers is illiterate, 37 (%) students' fathers' educational status is primary school, 10 students' fathers' educational status is secondary school, and 6 students' fathers' educational status is graduate. 12 (%) of students' mothers are illiterate, whereas 37 pupils' mothers have a primary education. The educational status of 9 students' mothers is secondary school, and the educational status of 2 students' mothers is graduate. 36 percent of students' fathers work as daily wage earners, 11 percent work for themselves, and 3 percent work for the government, while 10 percent of students' fathers are unemployed. 9 (%) pupils with mothers who work for themselves, 25 (%) students with mothers who are daily wage earners, and 26 (%) students with mothers who are jobless; 44 (%) of the students at Gangothri College of Nursing in Bangalore had a family income of less than Rs. 20,000, 15 had a family income between Rs. 20,000 and \$45,000, and one had a family income of more than Rs. 1 lakh; Students at Bangalore's Gangothri College of Nursing (12%) received information about the labor process from the health staff, Six students received labor process information from parents, friends, or relatives; six students received labor process information from social media; and 36 students received no labor process information. All of the students had insufficient knowledge; however, 33.3% of the samples attained moderate knowledge by the time of the posttest. Of the samples, 66.7% had sufficient expertise. This demonstrates an increase in knowledge following VAT.

Knowledge level	Category	Classification of subjects			
		Pre-test		Post-test	
		Number	Percent	Number	Percent
Inadequate	<50%	60	100	0	0
Moderate	51-75%	0	0	20	33.3
Adequate	>75%	0	0	40	66.7
Total	-	60	100	60	100

INTERPRETATION AND CONCLUSION

The calculated t value in this study is 47.95, which is larger than the tabulated t value of 2. Thus, the H1 Hypothesis is confirmed. The teacher's effectiveness was determined by the researcher. As the chi-square value is higher than the table value at the 0.05 level of significance, there is a significant relationship between posttest knowledge level and the socio demographic variables such as gender, type of family, fathers' educational status, fathers' occupation, mothers' occupation, and monthly income. As a result, it endorses the H2 Hypothesis.

The overall findings of the study clearly showed that the VAT was significantly effective in improving the knowledge scores of 4th year B.Sc nursing students regarding labour process.

Statistics	Subject's knowledge	Paired 't' test
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	Mean	SD	Mean%	SD%	
Pre-test	3.23	0.64	32.3	6.4	47.95
Post-test	7.7	0.71	77	7.1	
Enhancement	4.47	0.07	44.7	0.7	-

*Significant at 5% level, t(0.05,59 df)=2

Variables	Below Median	Median and above	Chi square	Df	P value (0.05)	Inference
1. Age in years			0.43	1	3.84	NS
a. 20- 21 years	19	36				
b. 22-23 years	1	4				
2. Gender			9.14	1	3.84	S
a. Male	2	20				
b. Female	18	20				
3. Type of family			15.1	1	3.84	S
a Joint family	15	9				
b Nuclear family	5	31				
4. Area of residence			3.19	1	3.84	NS
a Rural	11	31				
b Urban	9	9				
5. Father's educational status			24.48	3	7.815	S
a. Illiterate	4	3				
b. Primary	10	27				
c. secondary	0	10				
d. diploma/graduate	6	0				
6. Mother's educational status			12.89	3	7.815	NS
a. Illiterate	5	7				
b. Primary	7	30				
c. secondary	6	3				
c. Graduate	2	0				
7. Father's Occupation			18.57	3	7.815	S
a. Unemployed	9	1				
b. Daily wage earner	9	27				
c. Self employed	1	10				
d. Government	1	2				
8. Mother's Occupation			14.57	3	7.815	S
a. Home maker	6	20				
b. Daily wage earner	6	19				
c. Self employed	8	1				
d. Government	0	0				
9. Monthly income of the family(Rs)			10.25	3	7.815	S
a. 5000- 10000	10	34				
b. 10001-15000	10	5				
c. 15001-20,000	0	0				
d. above 20,001	0	1				

10. Source of information regarding impact of tobacco use						
a. Health person	2	10	2.37	3	7.815	NS
b. Parents/ friends/Relatives	2	4				
c. Mass media	3	3				
d. No information	13	23				

Recommendations

On bigger samples, the current study might be replicated.

Similar research can be done in hospital settings.

It is possible to compare students from urban and rural areas.

To improve the understanding of the labor process, manuals and information booklets may be created.

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