

Effectiveness of Video Assisted Teaching vs Demonstration Method on Female Urinary Catheterization in Terms of Knowledge and Practice

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ABSTRACT

Background: Urinary tract infection (UTI) is the most common infectious disease especially among women. Accounting for approximately 8.3 million doctor visits each year, urinary tract infections rank as the second most common in all types of infection. The choice of teaching method also affects the student's interest, knowledge & skills.

Aim: The objective of this study was to assess the effectiveness of video assisted teaching verses demonstration method on female urinary catheterization in terms of knowledge and practice.

Method: In this study Pre-Test Post-Test Design was used which is a quasi experimental design. Sample size was 60. A semi structured questionnaire & observation checklist was used to assess the knowledge and practice among GN.M.2nd year female students of Panna Dai Maa Subharti nursing college Meerut

Findings: In video assisted teaching, the post test knowledge was increased (20.76) than demonstration method (18.03) as well as the post test practice was increased in demonstration method (16.4) than video teaching (16.8) regarding female urinary catheterization. The post test Knowledge and practice correlation coefficient of Group A was 0.219517 where as in the Group B it was found 0.271137.

Conclusion: For improving the clinical competencies of the students, demonstration method is more effective than video assisted teaching.

Keywords: Female Urinary Catheterization, Video Assisted Teaching, Demonstration Method. Nursing Students (G.N.M - General Nursing Midwifery)

INTRODUCTION

Effective teaching methods will influence the student learning process Demonstration can be defined as visualized explanation of facts, concepts and procedures. A demonstration is useful either by itself or to accompany a formal lecture or informal talk in the classroom, laboratory or clinical area. For teaching and training nowadays videos are being used extensively specially in the field of open education. Nursing education is practice discipline; the students will learn the subject matter by doing the things and practices the skills. It is a science, as it is based on systematic body of knowledge and principles of education. It also implies as an art, as it requires professional skills especially based upon humanitarian approach.

STATEMENT OF THE PROBLEM

A comparative study to assess the effectiveness of video assisted teaching verses demonstration method regarding nursing procedure on female urinary catheterization in terms of knowledge and practice among G.N.M-2nd year students of Panna Dhai Maa Subharti Nursing College Meerut, Uttar Pradesh.

OBJECTIVES

- To assess the pre-test level of knowledge & practice score regarding the video assisted teaching verses demonstration method of nursing procedure on female catheterization among the G.N.M.2nd year students.

- To evaluate the effectiveness of video assisted teaching verses demonstration method of nursing procedure on female urinary catheterization among the G.N.M.2nd year students.
- To correlate the knowledge with practice before and after administration of the video assisted teaching verses demonstration method of nursing procedure on female urinary catheterization among the G.N.M. 2nd year students

prepared to assess the knowledge regarding nursing procedure of female urinary catheterization and observation check list(25 item) to assess the practice skills for both group.

Table 1: Schematic Representation of Research Design

DAY-1		DAY-2	DAY-7
Group	Pre-test	Intervention	Post-test
R1	O1	X a	O2
R2	01	X b	O2

Keynote:

Xa-video assisted teaching,

Xb- demonstration method

MATERIAL AND METHOD

The present study was based on Quasi Experimental approach with Pre-test Post-test design. This study included 60 sample i.e. G.N.M. 2nd year students of Panna Dai Maa Subharti Nursing College Meerut. 30 students are selected for video assisted teaching (Group-A) and 30 students for demonstration method (Group-B). An semi structured questionnaire (30 item) was

RESULTS

I Findings: Regarding effectiveness of video teaching VS demonstration method in terms of knowledge on female urinary catheterization N=60

Table 2. Comparison of pre-test and post-test knowledge score of both groups.

S. No.	Group	Mean ±SD		Mean Difference in %	Probable Value of Paired-t-Test	P. Value/ Significant
		Pre-Test	Post-Test			
1.	Group-A(Video Assisted Teaching)	14.63±3.89602	20.76±3.766306	70.47%	5.31124E-06	<0.001
2.	Group-B (Demonstration Method)	11.8667±3.104317	18.03±4.398145	65.82%	1.3691E-06	<0.001

Table 2 shows that there is a significant increase in the mean score of both the groups (P<0.001) after planned nursing intervention and also showing that

knowledge of students were increased in video assisted teaching then demonstration method on female urinary catheterization.

II Findings: Regarding effectiveness of video teaching VS demonstration method in terms of knowledge on female urinary catheterization

Table 3. Comparison of pre-test and post-test practice score of the both groups. N=60

S. No.	Group	Mean ±SD		Mean Difference in %	Probable Value of Paired-t-Test	P. Value/ Significant
		Pre-Test	Post-Test			
1.	Group-A(Video Assisted Teaching)	8.36±4.649682	16.466±2.096521	49.23%	5.71E-09	<0.001
2.	Group-B (Demonstration Method)	8.367±4.506572	16.8±1.954658	50.20%	3.17E-09	<0.001

Table 3 shows that there is a significant increase in mean post test knowledge score of both groups. But in comparison of practice score was more in demonstration method than video assisted teaching on female urinary catheterization

Table 4: Correlation between the post test knowledge and practice regarding female urinary catheterization N=60

Group	Correlation (r)	Level ofsignificance P< 0.5
	Knowledge/ practice score	
GROUP A (Video-assisted teaching)	0.219517	Not significant
GROUP B (Demonstration method)	0.271137	Significant

III Findings: Co-relation between the knowledge and practice before and after planned teaching programme of the video assisted teaching and demonstration method.



Table 4 shows that there is no correlation between the post test knowledge and practice score among group A (Video assisted teaching) and it's significant with group B (demonstration method) on female urinary catheterization.

DISCUSSION

The planned teaching programme has brought significant improvement in knowledge and practice scores regarding the Female Urinary Catheterization procedure and care.

Level of knowledge

- **GROUP A (video assisted teaching):** The majority of the participants (60%) had below average of knowledge before planned teaching programme, whereas after implementation, majority of the participants (43.3%) had good knowledge, (23.70%) had very good level of knowledge (16.70%) had excellent knowledge, 3.30% of them were having below average knowledge and 13.30% of them were having average knowledge regarding nursing procedure of female urinary catheterization.
- **GROUP B (demonstration method):** The majority of the participants (87%) had below average of knowledge before planned teaching programme, whereas after implementation, majority of the participants (40%) had below Average knowledge, as well as 40% had average knowledge and (20%) had good knowledge regarding nursing procedure of female urinary catheterization.

Level of practice

- **GROUP A (video assisted teaching):** After planned teaching programme, the majority of the participants (83.40%) had good level of practice score, 16.60% of them had Average level of practice regarding nursing procedure of female urinary catheterization.
- **GROUP B (demonstration method):** The majority of the participants (80 %) had good level of practice after planned teaching programme, 13.30% of the participants had very good level of practice, and (6.70%) had excellent level of practice regarding nursing procedure on female urinary catheterization.

Regarding the correlation between the post-test knowledge and practice score among video assisted taching Vs demonstration method the finding shows that there is no correlation between the post test knowledge and practice score among group A (Video assisted teaching) and it's significant with group B (demonstration method) on female urinary catheterization.

Hence it is proved that students have increased their level of knowledge after video assisted teaching than demonstration. But in comparison of mean post test practice score was increased in demonstration method than video assisted teaching. This helps to promote aseptic technique during the female urinary catheterization procedure and prevents the development of infections among patients. It also helps the educators to select an appropriate teaching method for explaining the nursing procedures during in service education programmes.

LIMITATIONS

- The sample size was only 60 students of G.N.M. 2nd year studying in Panna Dhai Maa Subharti Nursing College, Meerut.
- Each group received only one planned nursing intervention.

ACKNOWLEDGEMENT

Researchers are thankful to all samples of GNM 2nd year Panna Dhai Maa Subharti Nursing College students for their whole hearted co operation and forbearance without which the study never has become a reality.

- **Funding Sources:** This study was funded partially from researcher and Subharti University.
- **Conflict of Interest:** Authors have no conflict of interest to disclose.
- **Ethical clearance:** Ethical consideration had obtained by taking written permission from the authority of the college and informed consent was obtained from the study samples for participation in the research.

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