



IJSRM

INTERNATIONAL JOURNAL OF SCIENCE AND RESEARCH METHODOLOGY

An Official Publication of Human Journals



Human Journals

Research Article

December 2020 Vol.:17, Issue:2

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Procedural Video Vs Skill Demonstration Regarding Antenatal Examination on Knowledge, Skill and Perception among the Final Year Nursing Students



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Submitted: 12 November 2020

Revised: 02 December 2020

Accepted: 22 December 2020



HUMAN JOURNALS

www.ijsrm.humanjournals.com

Keywords: Procedural Video, Skill Demonstration, Antenatal Examination, Obstetrical Palpation, Nursing Students

ABSTRACT

Background: The advantages of video-assisted teaching are, a one-time investment will allow the agency to train as many people as they want over a long time, flexible, and the video cassettes contain the correct information, and you will not have people getting different messages from different people. During the Researcher's clinical posting, she could see that the students were not able to perform an antenatal examination and lack of adequate knowledge of the students in performing an antenatal examination and they were unaware of the purposes and its significance. The investigator's personal experience reveals the insufficiency of knowledge of the Nursing Students which increases fear among them and that reduces self-efficacy. **Aim:** To Evaluate the Effectiveness of Procedural Video Vs Skill Demonstration regarding Antenatal Examination on Knowledge, Perception, and Skill among final year Nursing Students in MTPG & RIHS, Puducherry. **Methodology:** A total of 80 students who had fulfilled the inclusion criteria and available during sample collection were selected using the Simple Random Sampling Technique with randomly assigned two Experimental groups by lottery method. Students in the experimental group I received Procedural Video and students in experimental group II received Skill Demonstration. After intervention students were assessed with a semi-structured knowledge questionnaire, skill assessment checklist, and perception scale. **Result and conclusion:** The calculated independent 't' test value of $t = -4.690$ and $t = 3.686$ shows statistically highly significant between Comparison of the level of the knowledge and skill regarding antenatal examination among final year Nursing students in procedural Video group and skill demonstration group in post-test respectively. The study result proved that the procedural video method of teaching has increased the knowledge and skill of the final year Nursing students, MTPG & RIHS, Puducherry.

1. INTRODUCTION:

Teaching is a characteristic of human activity. Methodic consideration to techniques and materials of teaching, learning, and subject matter which are essential for the development of creative teaching. The Nursing curriculum is composed of various subjects to be handled in every year of the course. **(Barkha Devi, 2019)¹**.

Learning is the procurement of habits, knowledge, and attitudes. Learning helps an individual's attempt to overcome obstacles or to adjust to new situations. It represents progressive changes in behavior. Learning is a process from birth to death of an individual. Experience is found to play a superior role in molding and shaping the behavior of the individual, directly or indirectly. **(ChandanPradhan, 2018)²**.

The teaching-learning process has an impact on the situation in which the complete process takes place. Teaching-learning is thought to be long lasting if it is related to real-life situations in totality. Teacher plays a vital role in imparting the knowledge to the learners and this is possible only when the teachers consider the demand and understand the need of the learner **(AparnaPandaey, 2018)³**.

The important principle in education is adopting a teaching method following the objectives, contents of the subject, and learners. The individual can learn faster and quicker through improved teaching strategies which are aimed specifically at improving memory storage and cognition, retrieval, and learning. **(SushmaPrabhu, 2013)⁴**.

Multimedia is a combination of numerous digital media such as pictures, content, sound, and video into a coordinated multi-sensory interactive application or demonstration to convey information to an audience. As the students are more attracted to the technology they can learn better by incorporating digital media into the system of education since they utilize numerous sensory modalities, which would make them more stimulated to give careful consideration to the data offered and hold the data better for a longer period **(Hanam El- Sayed Mohamed, 2017)⁵**.

Students' learning process is influenced by the effective teaching method. One of the methods of effective teaching includes demonstration, it can be defined as a visualized explanation of facts, concepts, and procedures. It is also accompanied by a formal lecture or informal talk in the

classroom, laboratory, or clinical area. Nowadays videos are being used extensively for teaching and training, especially in the field of open education (**GretaParwanda, 2019**)⁶.

Video may offer several training benefits. First, video models can present various behaviors in realistic contexts. Second, video can efficiently display numerous examples of stimulus and response variations. Third, video may be a useful medium for learners who cannot take advantage of print materials. Fourth, with video recordings, the learner can repeatedly review a model's behavior, if necessary. Finally, video standardizes the presentation of stimuli in training, which strengthens internal consistency and allows more confident comparison of data across learners and sessions.

Video-assisted teaching in Nursing education classes provides an easy, innovative, and user-friendly way to engage today's Nursing students. Video presentations can be easily utilized in all levels of Nursing education, like the fundamental course for undergraduate students or a theoretical foundations course for graduate students. Nowadays, Nursing students enter Nursing programs experienced in the latest communication technologies and knowledgeable about various media offerings so it is expected that nurse educators should use creative communication technologies to enrich the learning environment. An essential part of Nursing education is Clinical practice as it links theory with practice. Obstetrical palpation is one of the areas of clinical practice that demands accuracy and expertise that improve with the length of experience. Today's student nurses are tomorrow's professional nurses, they contribute more in the field of treatment, educating these students and creating awareness, helping them to learn more about the obstetrical examination, will bring about positive outcomes in the future health indicators and quality of care(**Barkha Devi, 2019**)¹.

During the Researchers clinical posting, she could see that the students were not able to perform antenatal examination and lack of adequate knowledge of the students in performing antenatal examination and they were unaware of the purposes and its significance.

The investigator's personal experience reveals the insufficiency of knowledge of the Nursing Students which increases fear among them and that reduces self efficacy. And for that aspect the Researcher has chosen the topic "To evaluate the effectiveness of Procedural

Video Vs Skill Demonstration regarding Antenatal Examination on knowledge, perception and skills among the final year Nursing Students at MTPG & RIHS, Puducherry.

OBJECTIVES

- To assess the pre-existing level of Knowledge on an Antenatal Examination among the final year Nursing students.
- To compare the effectiveness of Procedural Video Vs Skill Demonstration regarding antenatal examination on knowledge and skill among the final year Nursing students.
- To Assess the Perception of the students on the Procedural Video Vs Skill Demonstration method of teaching among the final year Nursing students.
- To Correlate Post Test level of Knowledge and Skill, Skill and Perception, Knowledge and Perception among the final year Nursing students.
- To Associate the Post Test level of Knowledge, Skill, and Perception of the final year Nursing students with their selected demographic variables.

2. MATERIAL AND METHODS:

2.1 STUDY DESIGN:

The research design adopted for this study was a Quasi-Experimental research design. It was conducted at Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India among final year B Sc Nursing students. The study was conducted for 30 days from 04/11/2019 to 30/11/2019.

2.2 STUDY PARTICIPANTS:

The study participants included all the final year Nursing Students in MTPG & RIHS. A total of 80 students had fulfilled the inclusion criteria and available during sample collection. The sampling technique adopted in this study was the Simple Random Sampling Technique with randomly assigned two Experimental groups. Out of 80 final year Nursing Students, the lottery method was used to select the Procedural Video group and Skill Demonstration group. Informed

consent was obtained from the students selected for the study. Students were informed about the benefits, purpose of the study.

2.3 TOOLS:

Section -A

It consists of Demographic variables which include age, gender, residence, previous academic performance, previous experience in taking care of the antenatal mother, previous knowledge on antenatal examination.

Section -B

It consists of a semi-structured knowledge questionnaire about the antenatal examination. Totally 37 questions were framed with a total score of 58 marks. Some questions had 3 correct responses some had 2 correct responses and the remaining questions had a single correct response.

Section -C

It consists of a Checklist to assess the skill of the students on antenatal examination. It has 16 elements in which each correct response carries 1 mark and each incorrect response carries 0 marks.

Section -D

It consists of a Perception scale to assess the perception of the students towards both the educational methods. It has 10 statements with a total score of 50.

Section -E

It consists of a Video Assisted Teaching Module which was prepared by the Researcher after extensive reviews of books, journals on antenatal examination. The video-assisted teaching module consisted of information on the Antenatal Examination.

2.4 DATA COLLECTION:

The data collection was done in the final year Nursing classroom, in MTPG & RIHS. In phase 1, the Pre-Test level of Knowledge was assessed by using the Semi-Structured Knowledge Questionnaire. In phase 2, Experimental group I had a Procedural Video session regarding an Antenatal Examination in the classroom with the help of an LCD Projector. Experimental group II was divided into subgroups (each group had 5 students) for effective listening and had skill demonstration session in the OBG lab with a Mannequin In phase 3 the Post Test Level of Knowledge and Perception was assessed on the 8th day using a semi-structured knowledge questionnaire and perception scale respectively and skill was assessed using the checklist.

3. RESULTS AND DISCUSSION:

The analysis and interpretation of the data collected from 80 Nursing students to Effectiveness of procedural video versus demonstration method regarding antenatal examination on knowledge and skills among final year Nursing students at MTPG & RIHS, Puducherry. The data was organized, tabulated and analyzed according to the objectives. Data analysis begins with description that applies to the study in which the data are numerical with some concepts. Descriptive statistics allows the researcher to organize the data and to examine the quantum of information and inferential statistics is used to determine the relationship.

Table 1: Comparison of the post-test level of knowledge regarding antenatal examination among the final year Nursing students in Procedural Video and Skill demonstration group. (N=80)

Post test	Groups	Mean	Standard deviation	“t” Value Independent t-test	p- Value
Level of the Knowledge	Procedural Video	40.6	9.92	-4.690	0.001**
	Skill demonstration	31.3	7.72		

**-p < 0.001 highly significant

Table 1 shows that, the mean score of in the level of knowledge in the procedural Video method was 40.6 ± 9.92 and the mean score in Skill demonstration method was 31.3 ± 7.72 respectively. The calculated independent 't' test value of $t = -4.690$ shows statistically highly significant between Comparison of the level of the knowledge regarding antenatal examination among final year Nursing students in procedural Video group and skill demonstration group in post-test respectively.

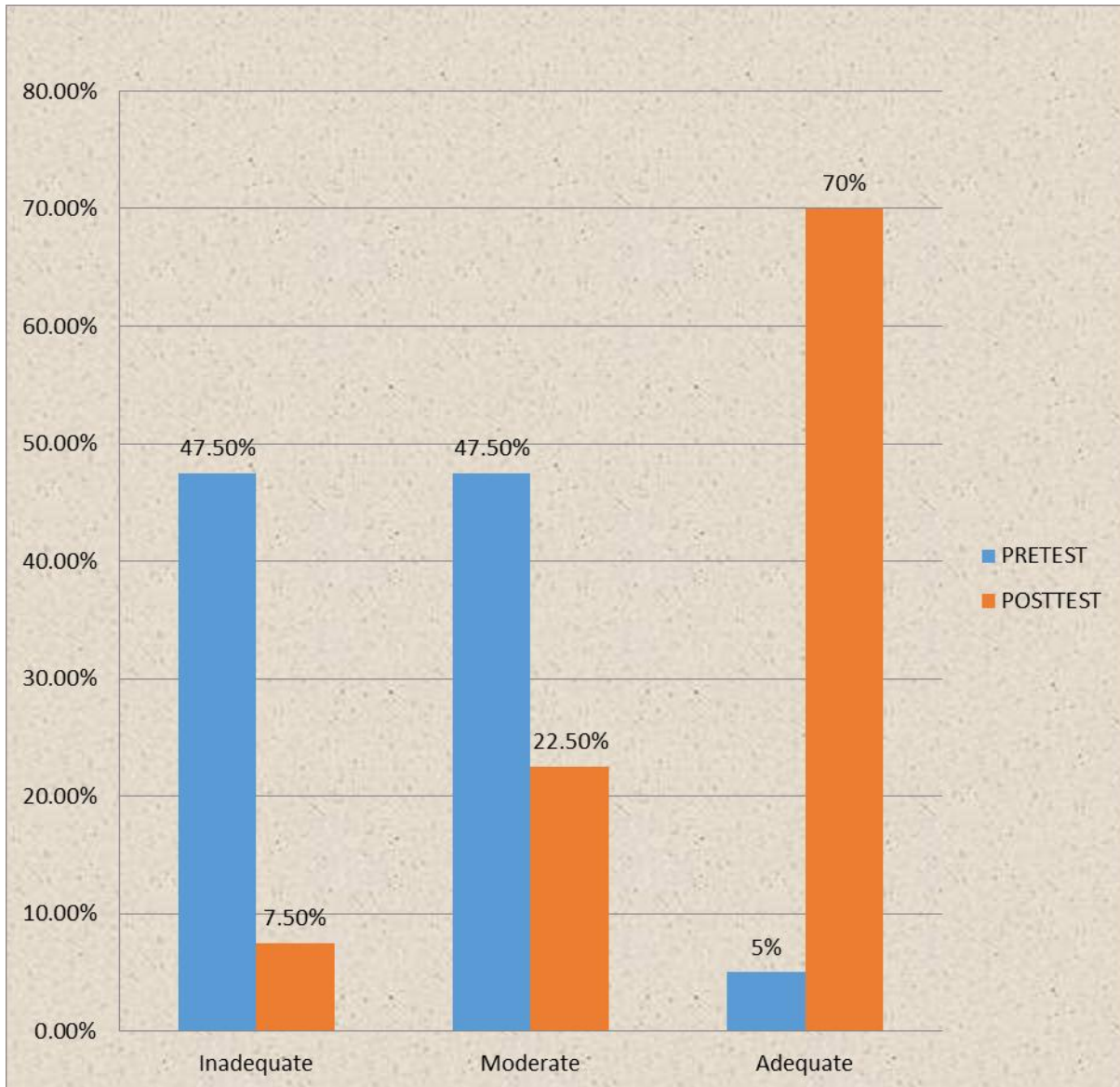


Fig 1.1: Distribution of Pre-test and post- test level of knowledge regarding antenatal examination among the final year nursing students in procedural video group

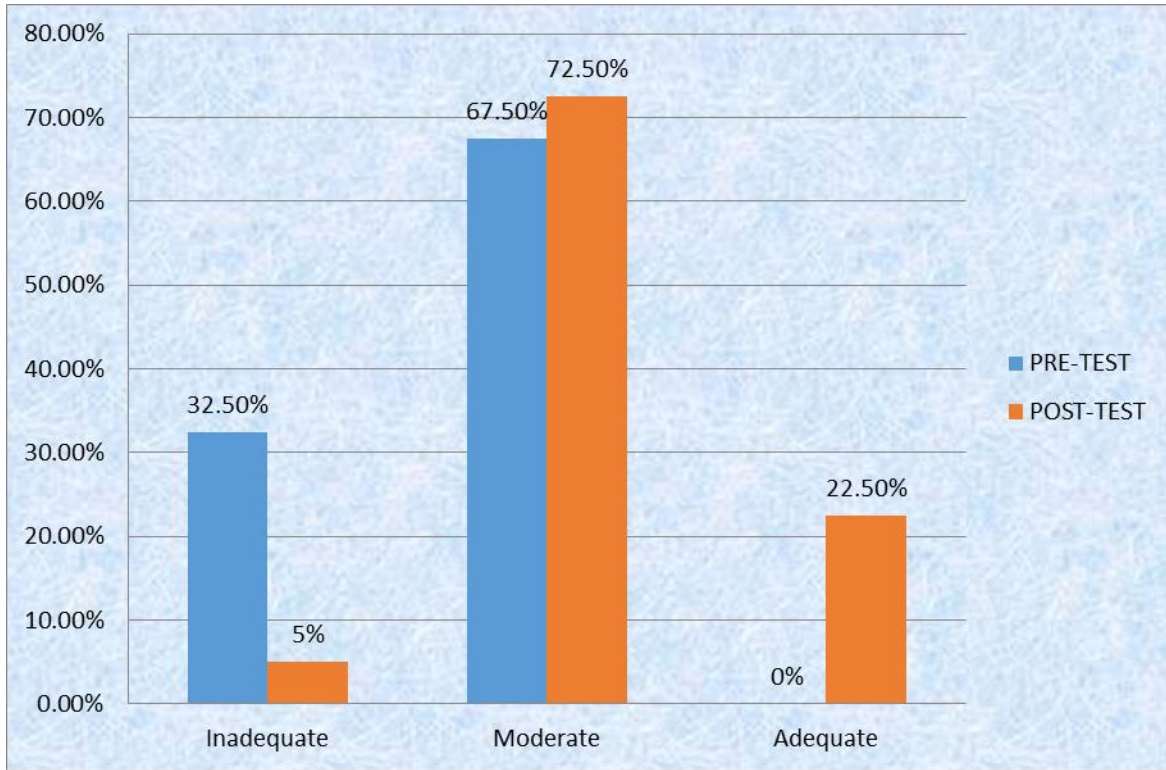


Fig 1.2: Distribution of Pre-test and post- test level of knowledge regarding antenatal examination among the final year nursing students in Skill demonstration group

Table 2: Comparison of the post-test level of skill regarding antenatal examination among the final year Nursing students between Procedural Video group and Skill demonstration.

(N=80)

Post Test	Groups	Mean	Standard deviation	“t” Value Independent t-Test	p- Value
Level of the Skill	Procedural Video	10.70	2.583	-3.686	0.001**
	Skill demonstration	8.775	2.056		

**-p < 0.001 highly significant

Table 2 shows that, the mean score of in the level of skill in the procedural Video method was 10.70 ± 2.583 and the mean score in skill demonstration method was 8.775 ± 2.056 respectively. The calculated independent 't' test value of $t = 3.686$ shows statistically highly significant between Comparison of the level of the skill regarding antenatal examination among final year Nursing students in procedural Video group and skill demonstration group in post-test respectively.

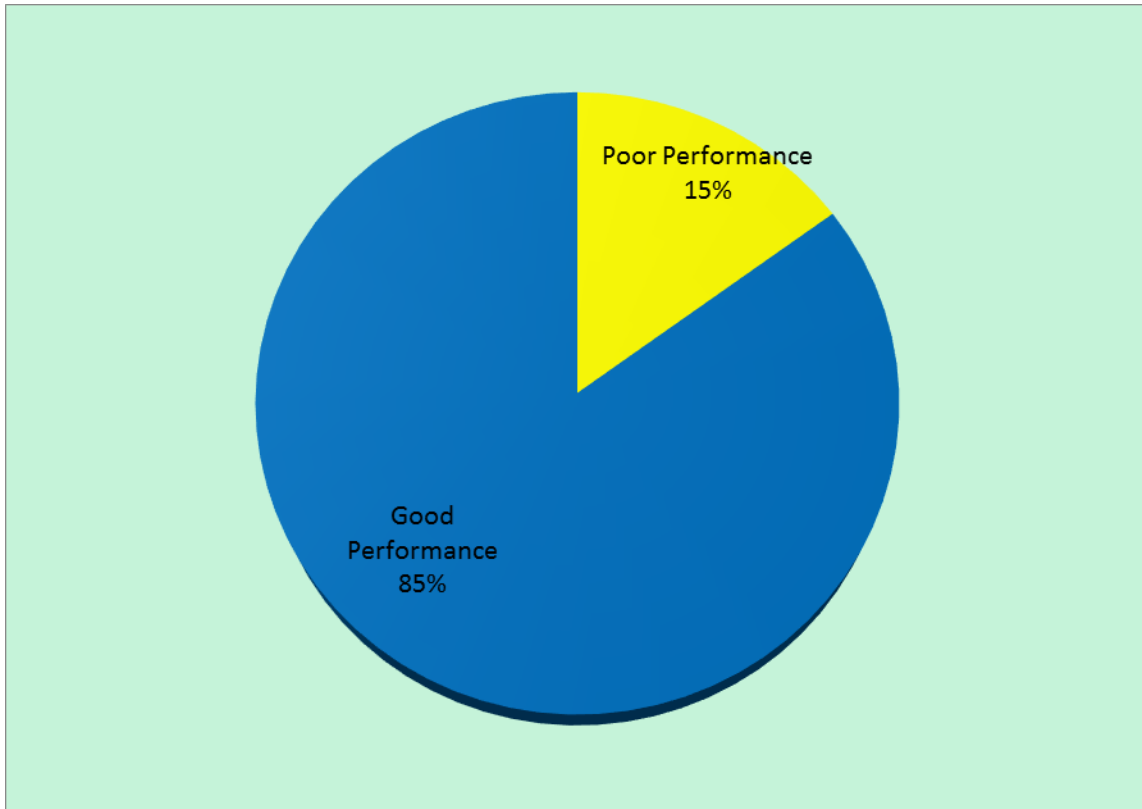


Fig 2.1: Distribution of the level of skill regarding antenatal examination among the final year nursing students in procedural video group

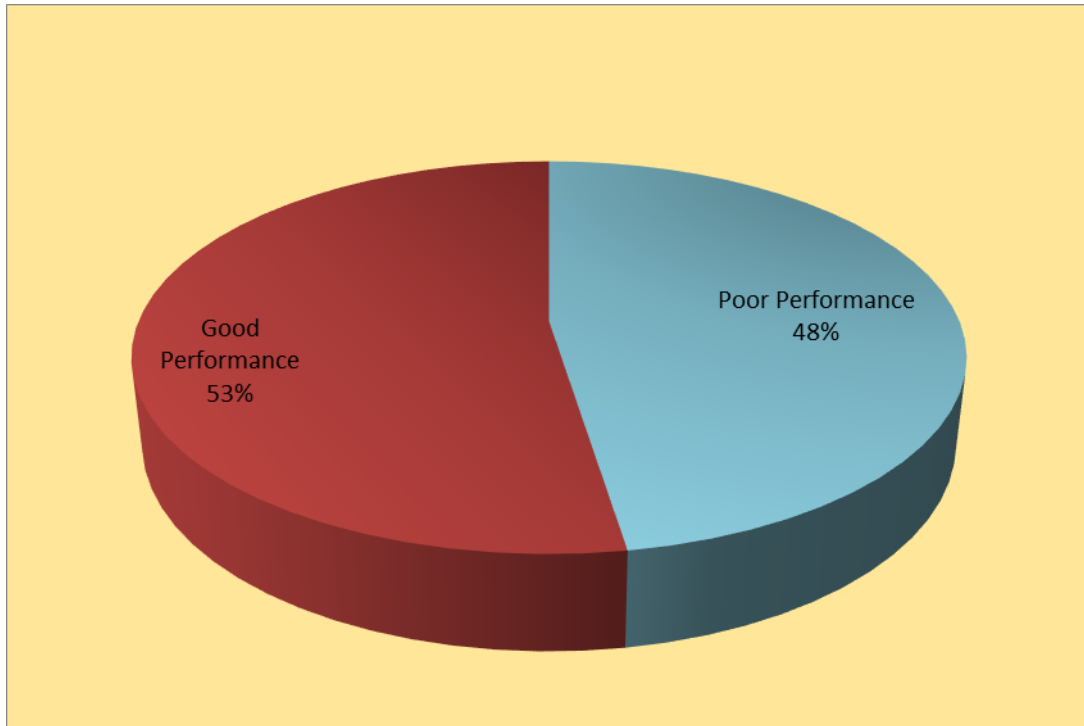


Fig 2.2: Distribution of the level of skill regarding antenatal examination among the final year nursing students in skill demonstration group

The result was supported by the study, “to assess the effectiveness of live demonstration and video assisted teaching on nasogastric tube feeding on the skill development” among 79 Nursing students selected by purposive sampling technique and skill development was assessed through the checklist and the results proved that comparison mean score (14.46 ± 2.79) in nasogastric tube feeding in live demonstration group was more as compared to video assisted teaching group (13.40 ± 2.11) and it was concluded that video assisted teaching helps to enhance better learning and skill development Kanwalpreet Kaur⁷, et al(2015).

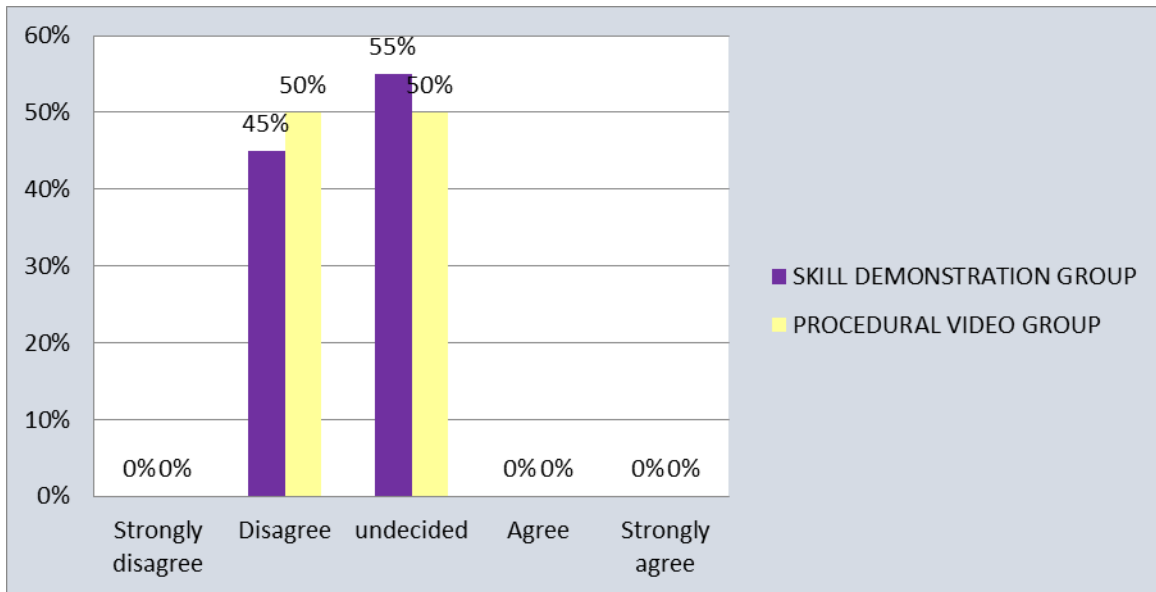


Fig 3: Distribution of the level of perceptions regarding antenatal examination among the final year nursing students in procedural video group and skill demonstration group

Fig 1 shows in procedural video group, half of the Nursing students 20 (50%) had undecided level of perceptions and other half of the Nursing students 20 (50%) had disagree level of perceptions regarding procedural video and skill demonstration method of teaching respectively. In skill demonstration group, Majority of the Nursing students 22 (55%) had undecided level of perceptions and other Nursing students 18 (45%) had disagree level of perceptions regarding procedural video and skill demonstration method of teaching respectively.

4. CONCLUSION:

The study result proved that the procedural video method of teaching has increased the knowledge and skill of the final year Nursing students, MTPG & RIHS, Puducherry. So, this method of teaching program on procedures can be promoted among the Nursing students and it can be inculcated in the curriculum and day-to-day classes in the classroom setting.

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