

USING VIDEO PHYSICAL ASSESMENT TO ENHANCE STUDENTS' SKILLS

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Abstract

Physical assessment is one competency that students must achieve during clinical rotation. Lack of understanding or inability to perform physical examinations will affect achievement data from patients that influences nursing diagnoses. This is challenging for clinical instructors and faculty to assist students to perform well on physical examination. Objective this paper is to preparing student's nurses able to practice on physical assessment using video. Method this research descriptive quantitative, sample in project was 30 second-year students nurses who enrolled in medical surgical nursing course. Result this research were according to achievement grade among 30 students on practical physical assessment respiratory system there are 26 (86.6%) got A; four students (13.4%) got B, on respiratory examinations. On Practical Physical assessment cardiovascular system the students' grades are 80% got A, 20% got B. There weren't students who get C.

Keyword: *physical assessment, using video, enhance student's skills*

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1. Background

Physical assessment is an organized procedure to get baseline data before making nursing diagnoses. Physical assessment is one competency that students must achieve during clinical rotation. When students are in second-year, they should perform physical assessments in cardiovascular, respiratory and neurology system before practical at hospital. Lack of understanding or inability to perform physical examinations will affect achievement data from patients that influences nursing diagnoses. This is challenging for clinical instructors and faculty to assist students to perform well on physical examination.

This century multimedia is developing quickly. Developing multimedia as teaching methodology is very useful to enhance students' learning. Multimedia as video helps students learning an interactive, effective and interesting way. Student love using multimedia to assist them learning something new and able to memories every time and everywhere using smartphone. The benefit of using video as a teaching strategy is students are able to learn more using picture and voices than lectures to enhance their skills.

Therefore, this project is developing teaching methodology using video physical assessment to enhance students' skill. Based on interviews with several clinical instructors in private hospital at Yogyakarta, they said that student's ability on

physical assessment needs to be enhanced, especially in clinical rotation.

Currently, students' abilities on cardiovascular and respiratory physical assessment are not well; they cannot perform satisfactorily on it. They said that the students' nurses need to learn better in laboratory before going to clinical. They also said that the new graduate students from our school still have limitation on physical assessment. The other limitation is that nursing form assessment do not provide nurse to do more on physical assessment, mostly doctor wrote on it and but didn't complete it.

The discussion with several faculties who teach medical surgical nursing and nursing foundation also mentioned that students did not perform well and need to enhance their skills. The discussion also stressed using video as a teaching strategy for physical assessment. Based on interview with students level three about competency in physical assessment, most of them said they cannot remember physical assessment well; they lack information about that.

2. Method

The video of physical assessment was made based on protocol/procedure that usually used at school. The process of video making is divided into 2 sections: first is taking respiratory system physical assessment, and second is cardiovascular system.

Process video making was use video camera with medium resolution. The editing process used video life movie maker. Total duration of the video was 20 minutes. After the process making video is finished, then present the video to the team of medical surgical course faculty and assistant Director.

They gave suggestions so it will better and able to apply in laboratory practice. the model for the video is one student and make informed consent. Furthermore, consider about legal ethic for the model, first the model signs the informed consent. All the students have copy of video and learning by watching video during practical on laboratory. The teacher only give simple explanation how to do practice physical assessment, then they learned by the video.

Total student number are 138 students that are preparing for clinical rotation. They all get opportunity to see the complete video. Sample was took 30 second-year students nurses , who will going to clinical practice. They attended the practical three times, first they attended practical laboratory with faculty and see the video and practical of each other under observation of faculty, it needs 4 hours. Second, they practice alone using video as guidance, and adjusting their time as needed. Third, they attended the exam and evaluation, every student practicing for 10 minutes and the faculties grade them.

3. Result and discussion

Student's achievement grade among 30 students, 26 (86.6%) they got A; four students (13.4%) got B, on respiratory examinations. In exam, cardiovascular system the students' grades are 80% got A, 20% got B. There weren't students who get C. Their evaluation about the video 71,4% strongly agree that the video give a good example on to do physical assessment, 78,57% agree that it show how to do inspection on lung and heart, 85,7% how to do palpation, 67,8 % agree the video gave good example on to do percussion and 64,3% on auscultation, 57.14 % agree that the video helped them on exam and 53,6% agree, and 46,4% strongly agree the video help to enhance their skills.

Based on the data showed that using video as method to enhance students' skill was useful for students' nurses. It meets that Physical assessment is very important to collect relevant data before interpretation, and becoming more evident as the scope of nursing role (Fennensey & Witman-Price, 2011).

Teaching physical assessment needs new strategy to enhance students' skills. Developing new teaching strategy is needed for faculty members. Concept about self-directed learning in higher education is really important; faculty should be able to facilitate from her/his students. Teaching strategy

using interactive video is one methodology to teach how to apply in nursing education.

In a study by Heimann and Pitternger (2000), they found that incorporating video such as teaching strategy in interpersonal communication showed positive benefit. Research also mentions that using video in nursing curriculum is good for the faculty to expand methodology in education and prepare student's center learning (Paulson, 2011).

Using multimedia such as video, you tube in 21ST century is improving education method. Sharoff (2011), mentions that integrating you Tube into nursing curriculum is good to provide information and engaging as teach future nursing professional. Ressler and Glazer 2010 in Sharoff (2016) stated that *"use social media will be a vital component in the next generation's ability practice competently, effectively, and collaboratively, and also patients and families"*.

Another study by Park and Yoo (2009) among student nurses who enrolled in fundamentals of nursing course at Ajou University Korea, research indicate that there are differences of exam score between students who learn using video and not, the score exam is demonstrate higher scores on students who learned using video.

There was a survey in colleges and universities about basic course technology information such as the percent of faculty using technology to enhance learning 36.1% and using multimedia 18.2% (Bloom & Hough, 2003). The study found that student's satisfaction learning using technology include multimedia was high (Bloom and Hough, 2003).

Furthermore, making video in laboratory class, especially on physical assessment will help students learn better. Some researchers mention that video is more effective for teaching information than a book or other medium. Bastable (2010) said that video also *"good means to capture real-life and practice experience situations"* p. 500. The usefulness of video due to the combination learning visual also auditory senses (Bastable, 2010). The duration of video will affect to students' attention. It is good to provide a video with short duration at least 5-15 minutes due to long duration *"might risk of losing viewer interest"*. (Bastable, 2010, p. 500).

Study by Grant and Watts (2009) about using video on students who practice on human patient simulator found that students who learned using video showed significant on their performance, and the score is higher than student who not use video. Hence this project on Physical assessment is very important to enhance students' competency in undergraduate nursing education.

4. Conclusion

In summary, using video for physical assessment gets positive results to enhance student's skills. Nursing faculty able to use interactive method to make a good model during teaching laboratory practice. Hence, learning using video based physical assessment is beneficial and effective method to enhance students' skills.

5. References

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