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Research article

The Impact of Cardiopulmonary Resuscitation Video Learning Media on Skills Improvement in Nursing Students: Literature Review

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ABSTRACT

Background: Understanding and skills of CPR are very important to be applied correctly and correctly, especially the understanding and skills that must be possessed by all health workers, including nurses. At this time, one of the skills that must be possessed by nursing students before becoming a professional nurse is cardiopulmonary resuscitation (CPR). To achieve this ability, appropriate learning methods are needed, one of which is using the audiovisual method. **Method:** The search for relevant articles or journals is carried out using a database through Google Scholar, Google Scholar, and Pubmed Central (PMC) in the period 2010-2020. The results of the search found 15 articles using nursing interventions but only 12 articles that met the inclusion criteria, namely according to the keywords. The analysis of these 12 journals was carried out based on the design, population, sample, sampling, parameters and conclusions sections. **Results** From the literature study that has been carried out on research or writing on the same topic, it can be seen that the Cardiopulmonary Resuscitation (CPR) video learning media greatly influences the improvement of skills in nursing students. recall, it will tend to disappear over time. **Conclusion:** With this, learning media using video can remind what they have learned and can be played over and over again so that they are able to improve the skills of these nursing students.

I. Introduction

In accordance with the flowchart of a journal review, it can be explained that the literature search is by using the Google Scholar website using keywords. The Effect of Cardiopulmonary Resuscitation (CPR) Video Learning Media on Skills Improvement in Nursing Students along with the year of writing. With the title and year of writing of journals and articles, they are sorted according to the year of writing which is not more than the last 10 years, then from the results of the selection of the year of writing articles and journals, they are re-selected according to the title or topic that is more or less the same. From this selection, identification of titles or topics that can be analyzed can be found so that several journals with the same title and topic are identified, namely the influence of Cardiopulmonary Resuscitation (CPR) Video Learning Media on Skills Improvement in Nursing Students.

As it is known that nursing students are part of the community which is also responsible for deaths due to heart attacks so that Cardiopulmonary Resuscitation (CPR) is a skill that must be mastered by students. Quality CPR can optimize return of spontaneous circulation, but many nursing students are not confident in performing this procedure (Behrend, 2011).

Oermann et al (2011), in their research on the quality of CPR on nurses, found that the quality of CPR performed by nurses was still poor even though they had attended training. This is because knowledge and skills in performing CPR, without practice and recall, will tend to be lost over time.

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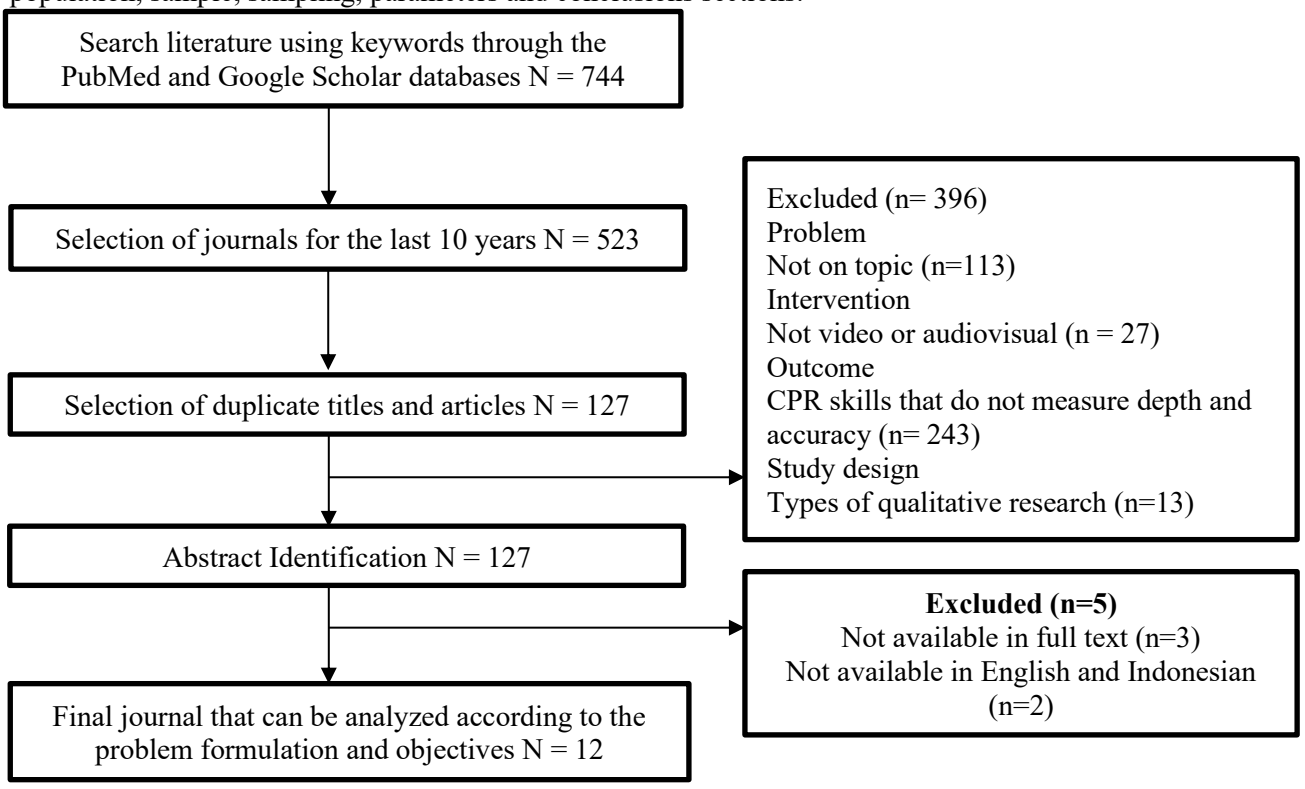
This is supported by the results of research by Husebo et al, (2012) who obtained data that the performance of nurses in performing CPR is still poor. Perkins et al (2008), said that knowledge and skills are needed in carrying out CPR actions, but in the context of students who are less exposed to events that require these actions, they often do not have competence in BLS. Therefore, it is important to provide learning and find teaching methods that support their knowledge and skills about CPR. CPR skills are scientific learning and nursing students are required to be able to do it, so training and good teaching methods are needed. Learning methods and media have a significant role in the learning process because they can foster student interest in participating in the learning. In the basic competence of undergraduate nursing education, students must be able to carry out resuscitation or basic life support (AIPNI, 2010).

The ability to perform CPR is also a basic competency that must be possessed by a nurse. These skills also support the competence of expert nurses, namely carrying out basic life support procedures in emergency and disaster situations (PPNI, 2012).

A study conducted at PSIK FK UGM conducted in March 2015 on the documentation of skills evaluation documents, especially the value of CPR skills for the last 5 years (2009 – 2014) it was found that 70% of students scored below the average Cardiopulmonary Resuscitation (CPR) skill. Expected average quality of CPR. In addition, in a preliminary study conducted in December 2017 at the STIKes Hafshawaty PZH Nursing Study Program for emergency practicum learning in the Nursing Undergraduate Study Program, data showed that students' CPR ability was still very lacking, from 50 final year students who passed the CPR competency exam, only 60%, 30 % of participants passed with conditions and the remaining 10% had to retake the exam. Based on these problems, where students are still not able to improve the ability of cardiopulmonary resuscitation (CPR) skills, improvements through changes in the use of learning methods are expected to be able to improve CPR abilities in the future.

II. METHODS

The search for relevant articles or journals is carried out using a database through Google Scholar, Google Scholar, and Pubmed Central (PMC) in the period 2010-2020. The results of the search found 15 articles using nursing interventions but only 12 articles that met the inclusion criteria, namely according to the keywords. The analysis of these 12 journals was carried out based on the design, population, sample, sampling, parameters and conclusions sections.



III. RESULTS

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IV. DISCUSSION

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Nursing students in the professional program are prospective nurses who will later work both in hospital settings and in pre-hospital settings. They must have the ability to perform CPR correctly so that when they are working they are expected to have the knowledge, attitudes and skills in terms of CPR, have high confidence when taking emergency relief measures, especially cardiac arrest. The method currently being developed in learning CPR is audio-visual media which is expected to be able to improve the knowledge and skills of nursing students. Research conducted by Addiarto (2018), it can be seen that there are differences in the ability of CPR before and after the intervention of the audiovisual method, so it can be concluded that there is a difference in the ability of CPR between before and after the intervention of the audiovisual method, so it can be interpreted that the method can improve the ability of CPR. students significantly.

The results of this study are in accordance with the opinion of Blewer et al., (2016) which states that the use of audiovisual (video) in CPR training activities will provide quite effective results in improving the abilities and skills of nursing students CPR because it can be repeated several times both in the practice area and in the classroom. home, this results in better retention of CPR ability.

Another study conducted by El-Sayed, Elmashad and Ibrahim (2017) stated that audiovisual learning really helps make it easier for nursing students to accept new knowledge because audiovisual learning is very likely to attract the interest and attention of students so that they focus on learning new knowledge or knowledge. then the audio visual will be able to improve students' skills in performing CPR.

Audiovisual is a modern instructional method that is in accordance with the development of science and technology and as an intermediary or use of material and absorption through sight and hearing so as to build conditions that can enable participants to improve their knowledge, skills, or attitudes, especially in performing CPR. In accordance with the results of another study by Mpotosa et al., (2012) that audiovisual if applied to CPR training participants will effectively improve the quality of chest compressions so that these results can be used as a conclusion that to get good CPR ability, audiovisual methods must be given and studied repeatedly.

The development of learning media for cardiopulmonary resuscitation with one helper was carried out by Maria (2018), in her research it showed that there were students who were less competent in soft skills by only reading and only one practice in learning laboratory skills. Lesson materials in the form of powerpoints containing titles, instructions, content framework and material and still images are less attractive and less attractive. The development of learning media in the form of multimedia, namely in the form of videos, is carried out to find more competent learning designs in improving students' soft skills. With this video, it will help improve the soft skills of nursing students. CPR video learning media

has been widely used in research for CPR skills which also includes aspects of depth and accuracy of CPR. Both self-directed videos and self-instruction videos generally show good results as learning media for skills and knowledge which include aspects of good CPR accuracy and depth. However, what needs to be considered is that the assessment of the skill variable is still related to the flow of the hands-only CPR procedure, not seeing the quality of the CPR applied. However, this can be an early barometer that self-directed video can improve knowledge, attitudes and skills in performing CPR. Based on a review of previous studies showing heterogeneous or varied results, it means that there are still studies that show the inability of video learning media in increasing the accuracy and depth of CPR which is reviewed through the knowledge and skills of performing CPR.

Research conducted by Sutono (2015) shows that in general there is no significant difference in the Cardiopulmonary Resuscitation (CPR) skills of undergraduate nursing students at the professional stage after receiving training with instructor feedback, with audio-visual feedback, and with a combination of both. However, when viewed from the value of each item, especially for chest compressions, as described above, there was an improvement in the scores from pretest to posttest, while for the ventilation component, there was not much difference in scores from pretest to posttest. Although the results obtained showed different results in each study, in general, the results showed that the use of video learning media was able to provide positive results at the compression level (Mpotos et al., 2013), a good average compression depth value (Mpotos et al., 2013). Sutono, Ratnawati and Suharsono, 2015), as well as showing good skill retention (Pedersen et al., 2018).

Based on several previous journals about the Effect of Cardiopulmonary Resuscitation (CPR) Video Learning Media on Skills Improvement in Nursing Students, the results showed better results, while from the general review the authors can provide an explanation that learning media using video media has its advantages and disadvantages even though the learning is able to improve skills in nursing students. As research conducted by Addiarto (2018), it can be concluded that there is a difference in the ability of CPR between before and after the intervention of the audiovisual method is given so that it can be interpreted that this method can significantly improve students' CPR ability. Research conducted by Addiarto and other research has advantages, namely the steps or material contained in video learning will not be missed and all can be learned by nursing students and can be played over and over again until students can really understand it. In addition, learning with video media can be played anywhere the nursing student is. While the drawback of video media learning media in general is the ability to understand or interpret nursing students in understanding the learning that is in different videos so that when doing practice errors will occur so that learning using video media depends on the ability or capacity of the nursing students' Human Resources. . With this, the role of a companion is absolutely necessary in the learning process using video media, although learning with video media is able to improve student skills in performing Cardiopulmonary Resuscitation.

V. CONCLUSION

Cardiopulmonary resuscitation (RJP) Video Learning Media has an effect on improving skills in nursing students, especially in increasing the accuracy and depth of performing CPR. Cardiopulmonary resuscitation (CPR) video learning media is able to improve student skills that video learning if applied to nursing students will effectively improve the quality of chest compressions so that these results can be used as a conclusion that to get good CPR ability, audiovisual methods must be given and studied repeatedly -repeat. There is a significant difference in student skills before and after receiving learning through video media, that by learning using video media students are able to improve CPR skills and reduce variations in heart compression counts..

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