Online Education About Covid 19 Using Zoom and Android App

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Abstract. The use of online learning methods has increased since the Large-Scale Social Restrictions (PSBB) were set by the government. The current condition is a challenge for the world of nursing education to immediately respond by conducting online learning using e-learning developed by related institutions or using learning support resources that are already available in cyberspace. The need for improvisation in the learning method becomes a rationale in the development of methods and infrastructure in the world of education. One system that can be used is an Android-based open source that can be modified and used by the majority of students.

The purpose of this study was to determine the effectiveness of the combination of online classical learning in combination with android-based applications. This study uses a quasi-experimental design. The material presented was updates about covid 19, prevention of the spread of covid 19 in the perspective of IPCN, nursing care for Covid 19 patients, mental health and psychosocial approaches to Covid 19 patients.

The results show that the combination of learning using online classics and combinations with android-based applications is effective for increasing student knowledge.

Keywords: online system · e-learning · Android App

1 Introduction

At the end of 2019, the World Health Organization (WHO) received information about a group of pneumonia cases in Wuhan City, Hubei Province, China. One week later, on January 7, 2020, Chinese authorities confirmed that they had identified the (new) coronavirus as the cause of pneumonia. The temporary name of the proposed virus is 2019 nCoV [1]. Currently the disease caused by the virus is known as COVID-19 or coronavirus disease 2019 [2]. Now COVID-19 has been declared a world pandemic by WHO [3] Nationally, through the Decree of the Head of the National Disaster Management Agency Number 9A of 2020 [4] which was updated through Decree number 13 A of 2020 [5], the Status of Certain Disaster Emergency Situations due to Corona Virus Disease in Indonesia has been determined. Furthermore, taking into account the escalation of cases and the expansion of affected areas, the Government issued Government Regulation No. 21 of 2020 [6] concerning Large-Scale Social Restrictions (PSBB)

in the Context of Accelerating Handling of COVID-19, as well as Presidential Decree No. 11 of 2020 [7] concerning Stipulation of COVID-19 Public Health Emergency, then updated with Presidential Decree No. 12 of 2020 [8] concerning the Determination of Non-Natural Disasters Spread of COVID-19 as a National Disaster.

The current COVID-19 pandemic affects various sectors directly and indirectly. One of the areas affected is the education sector for health workers. Some procedures are subject to adjustments. Information technology is currently developing rapidly with adequate infrastructure support. The availability of software, hardware, and internet networks opens up opportunities for innovation, including in the world of nursing education. The use of online learning methods has increased since the Large-Scale Social Restrictions (PSBB) were set by the government. PSBB is stated in Government Regulation (PP) Number 21 of 2020 [6] which one of the points is school and workplace holidays.

From the database of accreditation results, there are approximately 816 nursing education institutions in Indonesia that provide nursing education including Diploma Three (DIII), Bachelor (S1), Nurse (Ns), Master and Doctoral Nursing [9]. The current condition is a challenge for the world of nursing education to immediately respond by conducting online learning using e-learning developed by related institutions or using learning support resources that are already available in cyberspace.

The need for improvisation in the learning method becomes a rationale in the development of methods and infrastructure in the world of education. The android application is an option because it is an open source operating system that can be modified and used by the majority of students.

2   Research Method

This research is a quasi-experimental with pre-post test. This study consisted of an online classical learning intervention group & online classical learning coupled with the android-based application.

3   Results and Discussion

Online learning is actually distance learning (PJJ). Since the beginning, distance learning has always used technology for the implementation of learning [11]. Taylor [11] classifies the distance learning generation into five (5) generations, namely: (1) correspondence model, (2) multi-media model, (3) tele-learning model, (4) flexible learning model, and (5) a smarter flexible learning model (The Intelligent Flexible Learning Model). In the

Table 1. Intervention group difference test

	Mean	Std deviation	Std Error mean	Lower	Upper	t	df	Sig. (2-tailed)
pre_post_test	−2,02	5,59	,81	−3,64	−,40	−2,51	47	,016

Table 2. Control group difference test

	Mean	Std deviation	Std Error mean	Lower	Upper	t	df	Sig. (2-tailed)
pre_post_test	−,24	6,33	,71	−3,66	−,82	−3,15	78	,002

Table 3. Intervention and control groups different test

	F	Sig	T	df	Sig. (2-tailed)	Mean	Std. error	Lower	Upper
Equal variances assumed	,42	,517	−,20	125,00	,843	−,27	1,11	−2,42	1,98
Equal variances not assumed			−,20	108,98	,839	-,22	1,08	−2,35	1,91

fourth and fifth generations of PTJJ, jargons that are very popular in the community such as e-learning, online learning, and mobile learning are born which further popularize the PJJ phenomenon (Tables 1, 2 and 3).

As mentioned, online learning was born from the fourth generation after the Internet. So, online learning is learning that is done through the internet network. Therefore, in Indonesian online learning is translated as 'network learning' or 'online learning'. The term online learning is often synonymous with other terms such as e-learning, internet learning, web-based learning, tele-learning, distributed learning and so on [11]. In recent years, online learning is also often associated and used as the equivalent of the term mobile learning or m-learning, which is online learning through mobile communication devices such as tablet computers and smart phones [10].

Online learning has a positive effect, including because education can provide a safe environment so that participants do not feel intimidated and participants are free to express their opinions [12]. Some of the advantages of e-learning are universal access, that is, everyone can access the web with a web browser, meaning that everyone can deliver material from anywhere and anytime around the world. Easy of use, internet and intranet are easy to use, easy to reach by wide users even with limited computer experience. Multimedia content, namely this technology supports multimedia so that the content can be more interesting and can facilitate the way users learn with different learning styles [13].

Online learning is proven to be effective in improving learning achievement [14]. In addition, online learning has a positive impact on the nursing education system [15]. Online learning also has a relationship with the quality of student learning [16]. For this reason, the development of online learning media with various platforms needs to be developed in order to improve the quality of the education system, the quality of student learning, and student achievement.

4 Conclusion

Online learning methods are effective for increasing knowledge about Covid 19. Especially for first-year students who have not had much contact with the world of nursing education. In this study, all materials, pre-test, and post-test were carried out in full online.

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