

## COVID-19 SPECIAL COLLECTION

### CASE STUDY: Innovation in learning assessment

# Perceptions of pharmacy students at a health polytechnic of online learning during COVID-19 pandemic

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Perception  
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**Summary:** COVID-19 is a virus that became first apparent in Wuhan City. The virus has spread rapidly throughout the world, including in Indonesia and has caused harm in many countries, not only attacking the health systems but also impacting the social, economic and educational orders. In the field of education, COVID-19 has changed the learning model drastically; all learning activities must now be done online. This case study is a simple descriptive design research with sampling using a stratified random sampling technique. A total of 120 responses were received from students at Department of Pharmacy, Health Polytechnic of Health Ministry Kupang. Data was collected using an online questionnaire. The results of the data analysis showed that 62.5% had a negative perception of online learning. Online learning methods were therefore deemed to be less effective during the COVID-19 pandemic.

#### Background and Context

COVID-19 is a virus that became first apparent in in Wuhan City, China. The virus has spread rapidly throughout the world, including in Indonesia (Ministry of Health, 2020). The spread of the virus has caused harm in many countries around the world, not only attacking health systems but also impacting the social, economic and educational orders. In the field of education, COVID-19 has changed the learning model drastically, all learning activities from elementary school to higher education must now be completed virtually (Ministry of Education and Culture, 2020; Ministry of Home Affairs, 2020).

#### Educational Description

Research was conducted in the Health Department of Poltekkes Kupang, with regular students as respondents to find out their perceptions of online learning. The results of this study would then be applied by the Department to fix and develop systems of online learning. This research was carried out through three stages:

- First, the preparation stage: the researcher prepared the conceptual framework, research design, and questionnaire;
- Second, the implementation stage: the researcher collected, analysed, and processed data;
- Third, in the final reporting stage: the researcher created a report.

The study was carried out in July 2020 using simple-descriptive design and using all students as the study's population. The sample selection was carried out using a stratified random sampling technique by dividing students into two groups (batch 2018 and 2019). The sample of respondents had to fulfil the inclusion criteria which included male and female, active pharmacy student, or not on leave, and members of online learning platforms. The number of samples fulfilling the inclusion criteria was 120 respondents. Data about the description of online learning in pharmacy students was collected in the form of a questionnaire (Auliyah, 2012). The questionnaire was distributed via Google

Forms, with students giving their consent before filling it out. The questionnaire did not ask respondents names, so confidentiality of information on research subjects was guaranteed by the researcher. A closed questionnaire was used for collecting data. In this case, the questions were produced in such a way that the respondent was limited in providing answers, choosing one answer from a few alternatives. The data collection was carried out after obtaining a permit from the Department of Pharmacy, Poltekkes Kupang in accordance with the research conducted. The analysis used in this research was Univariate analysis (Auliyah, 2012; Arnesti & Hamid, 2015).

### Outcomes and Recommendations

The outcome of this study was that students were able to adapt to the online learning method without neglecting the quality of learning, where the quality of online learning was not significantly different from face-to-face learning.

Online learning had many obstacles so the discussion process and learning outcomes were not in accordance with the achieving targets. According to students, online discussions limited the interaction in the course, because not all students were able to speak at the same time. Online classes also increased misunderstanding due to the written text which was difficult for students to understand.

Some recommendations can be given. Firstly, institutions should prepare materials that support online learning programmes such as preparing a good internet network, providing internet quota subsidies, preparing new protocols, or standard operating procedures to enable a combination of online and face-to-face classes, especially for practical lectures which require laboratory equipment (Hartanto, 2016). Secondly, students have to learn and improve their abilities in information technology and be able to create small online groups through other social media learning platforms, allowing course materials to be discussed there. Finally, researchers need to conduct further studies on a broader and more varied scale using a variety of samples, not only from the pharmacy department but also from other departments outside the Department of Health Polytechnic Pharmacy, Ministry of Health Kupang.

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