

Review of Medical Ethics on the Use of Information Technology in Clinical Skills Learning

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Abstract—The Covid-19 pandemic has changed many aspects of life. One of the areas affected is education. Educational methods have been adapted by implementing distance education. Learning clinical skills that involve humans must comply with ethical principles and applicable regulations. This study aims to determine the review of medical ethics and law on the implementation of clinical skills learning using information technology in a medical school. The research was conducted qualitatively. Data were collected using interview, observation, and document studies. Interviews were conducted with experts in the fields of law, ethics, and medical education. Observations were carried out using passive observation techniques on the implementation of clinical learning using network methods. Document studies are conducted on documents related to learning by using information technology. The results of the study indicate that the practice of clinical learning carried out in a medical school has complied with aspects of medical ethics and is in line with the applicable laws and regulations.

Keywords—*medical ethics, information technology*

I. INTRODUCTION

The sudden onset of the Covid-19 pandemic has changed the condition of society. These changes also have an impact on learning methods at various levels of education. Not a few educational units use information technology as a learning tool in an effort to adapt to the conditions they face.

The values of compassion, competence and autonomy are values adopted in carrying out the medical profession. In reality, these values are limited to the medical profession. The high hopes for medicine to apply these values are very high compared to other people, even other professions.

Compassion is one of the important values for a medical profession [1]. By applying compassion, a doctor will evaporate to be able to understand the problems faced by patients. A professional doctor will pay attention to a patient as a whole human being. With this condition, the patient will feel happy and will give his trust to get treatment by the doctor [2].

As a professional, a doctor also has to have good competence. A qualified competence will guide a doctor in carrying out his profession well. Competence that is considered lacking by a doctor will have implications for the decline in public health status due to substandard health services. Education which is considered long until the competence of a doctor can be achieved, also faces challenges to continue to carry out continuous medical education. This is a logistical consequence that science related to disease and therapy continues to develop along with the development of science. Therefore, a doctor must continue to strive to maintain and improve competence, both knowledge and clinical skills.

Professional autonomy is an important value in medical practice. The freedom of the profession in carrying out medical practice must be fulfilled by every doctor so that the practice is carried out in accordance with the principles of medical ethics. Professional autonomy provides space for doctors to determine the best treatment plan for patients and their health. Various challenges related to professional autonomy are faced by doctors. Efforts are needed to be able to maintain the professional autonomy of doctors, from the level of education in educational institutions to continuing education organized by professional organizations. The success of medical education requires a variety of efforts at various levels. At the departmental level, teaching staff must be supported by a good understanding with adequate ethical training [1]. Noble ethics, morals or morals basically cannot be realized optimally in the form of righteous deeds if they are not based on the solidity of faith and maturity of knowledge. So that in addition to strengthening the aspects of cognition and skills, students must also strive to obtain a good Islamic religious education [3].

Teaching related to the noble values of the medical profession is not an easy thing. Moreover, this must be done in the era of the COVID-19 pandemic. This condition is also experienced by the Faculty of Medicine as an institution that specifically educates the medical profession. With the obligation to provide clinical skills learning to its students, the Faculty of Medicine is facing challenges during the Covid-19 pandemic. Clinical skills learning which is usually done face-to-face is adapted to facilitate online learning methods. Ethical

and legal issues then arise as a logical consequence of changing learning methods that may involve humans as a means of learning related to information technology that allows remote access [4].

II. METHODS

The problem in this study is the aspect of medical ethics in the practice of learning clinical skills using the use of information technology. This study aims to provide an overview of medical ethics in the practice of learning medical clinical skills. This study has an urgency to obtain an overview related to medical education learning at the Faculty of Medicine, Islamic University of Bandung in the use of information technology whether it is in accordance with applicable ethical and legal rules.

The research was conducted qualitatively. Data were collected using interview, observation, and document studies. Interviews were conducted with experts in the fields of law, ethics, and medical education. Observations were carried out using passive observation techniques on the implementation of clinical learning using network methods. Document studies are conducted on documents related to learning by using information technology.

III. RESULTS

The results of interviews with informants obtained an illustration that epidemic conditions were always faced with limited resources. Ethical principles can be used as a basis for consideration in the allocation of limited resources. There are many perspectives regarding the allocation of resources during an outbreak. The different perspectives can be due to different points of view regarding the placement of priorities based on the value of equality, the best results, or prioritizing the least fortunate. There needs to be a certain framework of thinking that allows the management of these limited resources to be allocated equitably.

The process of allocating limited resources must reflect existing ethical values. Some ethical values that can be used as guidelines are the values of transparency, inclusiveness, consistency, and accountability. The value of transparency can be understood as an effort to provide sufficient information to the public about decisions and justifications for resource allocation. The value of inclusiveness means that parties affected by resource allocation policies must be involved in the decision-making process, including the open nature of decisions with the possibility of revisions based on input from various parties. The value of consistency means that all people in the same category are treated the same way. Finally, the value of accountability means that every person authorized in decision making must be responsible for the consequences of the decisions taken. A fair allocation decision-making mechanism should not be taken by one party. So that the allocation of limited resources should not be outside a fair allocation system [5,6].

In addition to the allocation of limited resources, the COVID-19 pandemic is closely related to handling the spread which requires testing, tracing, and treatment if the learning process is carried out through a face-to-face mechanism. Efforts to handle the spread can be optimal if the management of information and data on the health of students and the academic community can be managed properly [7]. If the ability to manage education is not considered qualified, then alternative learning through online methods is considered wiser to be applied to current conditions. Management of health information and data also contains ethical aspects that need to be considered, especially the confidentiality aspect. In principle, data relating to individual health conditions must be protected and the disclosure of limited health information is only given to data relevant to transmission tracing policies or outbreak control programs in educational institutions.

In the Faculty of Medicine, Islamic University of Bandung, clinical skills are taught by complying with ethical and professional rules and are taught in an integrated manner through didactic sessions, small group supervision, and special activities. Teaching through the use of information technology is carried out to meet educational needs in the midst of limited mobility in an effort to overcome the COVID-19 pandemic.

Clinical teaching is carried out by various teaching methods. One of the most common is clinical supervision. Clinical supervision is carried out in at least five main stages which include preparation, observation, analysis/discussion, post-observation meetings and feedback meetings. All of these stages require prerequisites in order to be carried out properly including a long duration of time, a large number of educators, a limited frequency of meetings, and current conditions that make it difficult to conduct offline meetings. So that the use of information technology needs to be done in teaching clinical skills with this clinical supervision method. The media most often used in teaching sessions is synchronous information technology between lecturers and students [8,9].

Medically, teaching practice through the use of information technology can be justified in this era of the COVID-19 pandemic. The basic rules of bioethics are based on at least four aspects, namely aspects of autonomy, beneficence, non-maleficence, and justice. Autonomy means that there is room for freedom to respect every human dignity. Beneficence has the meaning that every action must be based on the existence of goodness in the implementation of activities. Non-maleficence means that every action must avoid the evil that may occur. While justice means presenting justice for all in every action. Teaching clinical skills through the use of information technology is considered to meet the basic principles of bioethics and provide space for every participant involved in a fair manner, seek the goodness of the teaching carried out, and avoid the potential harm of COVID-19 transmission by minimizing face-to-face activities [10].

According to the applicable positive law, the practice of teaching clinical skills at the Faculty of Medicine at the Islamic University of Bandung has complied with the applicable laws.

So it can be said that the practice of teaching clinical skills is legally valid. The legal aspect is important in the medical teaching process because it is a means of early learning for prospective doctors in the future.

IV. CONCLUSION

Based on the results of the study, it was concluded that the teaching of clinical skills carried out at the Faculty of Medicine at the Islamic University of Bandung had met the rules of bioethics and the teaching of clinical skills carried out at the Faculty of Medicine at the Islamic University of Bandung had met the legal aspect.

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