## **REVIEW ARTICLE**

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### Challenges for Medical Student in the Society 5.0 Era

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### ABSTRACT

**Background:** For health workers, the faster flow of globalization develops many challenges. Indonesia's health workers also face internal challenges. In contrast, in the 5.0 society era, the challenges are in the form of an emphasis on the quality of character, morality, and competence of the health workers.

**Content:** A medical student should be formed in the Community and Family Health Care with Inter-Professional Education (CFHC-IPE) education program, which develops competencies related to ethics, communication, teamwork, and roles and responsibilities in a team from the first day at college. The new challenge for medical education is applying the three new literacies, namely data, technology, and humanity, to produce Indonesian doctors who can adapt and meet national and global needs. Every graduate must meet the competency standards of doctors, which not only provide services to the community through professional practice but can also maintain the noble values of the medical profession.

**Conclusion:** Medical students in the 5.0 era have challenges that take work, particularly in developing new skills in data literacy, technology, and humanity, while still fulfilling their primary competencies.

Key words: Disruption, medical student, society 5.0



Published by: Universitas Negeri Gorontalo

**Mobile number:** +62852 3321 5280 Address: Jl. Jend. Sudirman No.6, Gorontalo City, Gorontalo, Indonesia

Email: jmhsj@ung.ac.id Article History: Received 25 December 2022 Accepted 9 February 2023 Published 31 July 2023 DOI: https://doi.org/10.37905/jmhsj.v2i1.21391

## Introduction

For health workers, the increasingly rapid flow of globalization is one of many challenges.<sup>1,2</sup> n Indonesia, health workers also face internal challenges, where in the era of Society 5.0, the emphasis is on the quality of character, morality, and competence of the health workers themselves. This is understood to be the era of human civilization and digital technology without eliminating real human identity—the concept in which society is obliged to humanize humans with technology. If the 4.0 revolution allowed us to access and provide information on the internet, the 5.0 era is when all technology is part of human origin. Based on the explanation of the Japanese prime minister, Shinzo Abe, that in society 5.0, it will no longer be capital that connects and drives everything, but data that will reduce the gap between the rich and the less fortunate.<sup>3,4</sup>

Medical and educational services, from elementary to tertiary level and will reach remote villages. The internet is not only for information but for living life so that technological developments can minimize gaps in humans and economic problems in the future. In facing the 5.0 revolution era, global education plays a crucial role in enhancing the quality of human resources. This causes education to be an aspect greatly affected by technological advances.<sup>5</sup>

Indonesia is a country in Southeast Asia which is a developing country. Factors influencing a country to develop as a developed country means human resources. <sup>6</sup> There are still many things that need to be improved in Indonesian education, starting from early childhood education to tertiary education, especially at the tertiary level. As the next generation, medical students need to prepare themselves to face the 5.0 revolution.<sup>7</sup>

### Challenges for Medical Student in the Society 5.0 Era

The way health workers think, including doctors in the 5.0 era, must begin at university, where the Faculty of Medicine is responsible for carrying out education to achieve competencies for medical student graduates. Students need to train and hone their abilities so that later they can survive in the revolutionary era. In the era of technological advances, a lot of work and human physical and manual tasks will begin to be replaced by artificial intelligence and automation systems.<sup>8</sup> Adam Jezard at World Economics said several primary abilities are needed in the future, namely cognitive abilities, social and emotional abilities, or what is commonly called "soft skills," as well as the ability to use technology.<sup>9</sup> Students, namely being able to think critically, solve complex problems and cases, and reach perfect

#### Jambura Medical and Health Science Journal, Vol.2 No.1 (July 2023) p-ISSN 2830-0580 | e-ISSN 2830-4608

decisions. Medical students also need to learn and practice soft skills. This includes how to communicate and negotiate, empathy, and the ability to adapt and work in a team. In addition, students need to master IT skills, how analyze data, and use software, because, in the future various health and global medical services will make much use of and intersect with technology.<sup>8,10</sup>

A medical student should be educated in Community and Family Health Care with Inter-Professional Education (CFHC-IPE) education program, which seeks to shape and develop competencies related to ethics, communication, working in teams, and roles and responsibilities in a team from the first day at school—attending college.<sup>11</sup> The new challenge for medical education is how to apply the three new literacies, namely data, technology, and humanity, to produce adaptable Indonesian doctors who can meet national and global needs. Every graduate must meet the competency standards of doctors, which not only provide services to the community through professional practice but can also maintain the noble values of the medical profession.<sup>12,13</sup> As an example of one of the leading faculties, Unissula Medicine offers opportunities for students to learn about technology in the medical field abroad. Currently, Unissula Medicine is affiliated with various international campuses, including the Faculty of Medicine And Health Sciences Universiti Sains Islam Malaysia, the Department of Plastic And Reconstructive Surgery Korea University/ Korea University/ College of Medicine, the Faculty of Medicine Prince of Songkla University, Faculty of Medicine Gunma University Japan, Bangladesh Journal of Medical Science and others -other. Another example is that in each course in the family medicine study program, a medical student must always emphasize thinking as a whole so that it encourages students to think laterally and practice it in more concrete professional skills acquired in each course. Medical students must be able to interact personally with family or society and work with other professions. Apart from that, from the first year of studying medicine, students must be deployed to the community and family. The family is the smallest unit of society is the suitable medium for students to sharpen their ability to communicate and work together, which is a part of Inter-Personal Education (IPE).<sup>14</sup>

With the learning method of the modern Faculty of Medicine, medical students will try to get to know their partners' family members and develop good relations with the family, as a result of which the idea will be formed from the start that curing a disease must come from the upstream, namely the family. A healthy family will also create a healthy environment so that a healthy human being will also be created when a community lives in a healthy environment.<sup>15,16</sup>

With this concept, there is no need to worry about the decline in the work of doctors and being replaced by new technology. The humanism side of doctors that has been built from the beginning will create a deeper emotional bond and increase the chances of maintaining health so that it can prevent the effects of more severe illnesses. Technology is support for creating better communication between doctors and families and encouraging the realization of direct health and the family in a preventive manner. Literacy in technology issues is an unavoidable thing. In the end, humanity and technology issues can coexist to create optimal citizen health services.<sup>10,12</sup>

Therefore, Indonesian medical students must be proud that they will become Indonesian doctors one day. When a sense of pride is instilled in being an Indonesian doctor, a passion will grow to love Indonesia and the spirit to prepare oneself to face various future challenges.

## Conclusion

In the era of society 5.0, as it is today, there are many challenges that various components of society must face. Medical students in this era face challenges that take work, particularly in developing new skills in data literacy, technology, and humanity. Apart from developing these skills, a medical student must still be able to fulfill his essential competencies as a doctor, both in knowledge, skills, ethics, and behavior.

# **Conflict of Interest**

Nil

# **Funding Sources**

Nil

# Acknowledgment

Nil

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