Medical Students' Role in Anticipating The Psychosocial Effects of The COVID-19 Pandemic: A Narrative Review

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The COVID-19 pandemic has affected learning activities in medical educational institutions all over the world. The world has managed to rise to the challenge of the global health crisis including mental health and well-being. Rethink the role that health students play during their education, not only in maintaining the continuity of their learning process but, also as agents of change who are part of health actions and responses. This literature review focuses on the role of medical students in anticipating the psychosocial impacts from the COVID-19. The main and supporting articles are search results from indexed international journal databases from Pubmed, ScienceDirect, or Google Scholar databases. Articles were searched using specific keywords with full text written in English, open access, EBM articles with a minimum level 3, and published in the last 5 years. Medical students can take part in ensuring the correctness of circulated information and prevent the spread of hoaxes, and be advised to educate the public to carry out activities for maintaining mental health. Students with stakeholders can create a database to support the health team and share it with other students at medical institutions, design and build information storage databases, create support teams for students for academic counseling, and mutual emotional support through a group under supervision by practitioners to equalize perceptions about everything that happens using interprofessional collaboration principal. A holistic approach based on community intervention is very possible for medical students to minimize the psychosocial impact after the COVID-19 pandemic era.

Keywords: COVID-19; medical education; medical student; post-pandemic; psychosocial.

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Introduction

The definition of health according to WHO is a state of well-being that includes physical, mental, and social well-being that is not simply free from disease, disability, or death.[1] In line with this, ensuring a healthy life and supporting prosperity for all ages is one of the absolute things in realizing sustainable development scheduled until 2030.[2] The world has managed to rise to the challenge of the global health crisis that has affected almost all countries, namely the COVID-19 pandemic. The pandemic era has brought significant changes in almost all areas of life. In organizations, these challenges include increasing levels of stress in communities worldwide, and a greater need to protect mental health and well-being.[3]

The health profession as the main actor in organizing health efforts is required to be ready to face this challenge. However, the condition of global health human resources is overshadowed by crises such as shortage of personnel, maldistribution, mismatch, imbalance in the number and quality of health professions, mismatch between the competence of health professions and the needs of the population, poor teamwork, and weak collaboration and leadership.[4]

The COVID-19 pandemic has also disrupted the education sector throughout the world and affected learning activities in medical and other health science educational institutions.[5] Therefore, it is time to rethink the role that health students play during their education, not only in maintaining the continuity of their learning process but also as agents of change who are part of health actions and responses.[6] The medical faculty has formative and social goals which are the basic idea of ensuring the welfare and health of the community.[7] Study from Ashcoft et al proposes a course and assessment structure for medical students' COVID-19 instruction, and it shows that medical students with the right training could be crucial to pandemic treatment later on.[8]

However, when COVID-19 broke out, it didn't mean that other diseases stopped threatening them. WHO also warned of a global mental health crisis due to the COVID-19 pandemic. The mental illness and mental health crisis may escalate as millions of people around the world are surrounded by death and disease and forced into isolation, poverty, and anxiety.[9] WHO states that 12% of the global burden of disease is caused by mental health problems. This figure is greater than diseases with other (physical) causes.[10] Mental health itself is a state of mental well-being that enables harmonious and productive living as an integral part of a person's quality of life by paying attention to all aspects of human life.[11]

Further research into mental health during the outbreak has proven that emotional distress is ubiquitous and threatens everyone. The Personal Growth Counseling Center recorded 327 cases of mental health problems in 22 categories on its free online counseling platform from March to May. It found that 33 percent of the 327 complaints were related to COVID-19.[12] Optimistic steps are needed by focusing on providing funding for a more efficient health system, better sanitation and hygiene, and efficient access to health services so that significant progress can be made in helping save the lives and well-being of millions of people, their physical and spiritual well-being.[13]

Indonesia lacks mental health resources to meet the country's needs. With a population of about 250 million in 2016, our country only has about 773 mental health workers, roughly one for every 323,000 people.[10] This figure is far from the WHO recommendation of having one mental health worker for every 30,000 people.[14] Amid the COVID-19 pandemic which also has an impact on mental health, the Association of Indonesian Psychiatric Medicine Specialists provides online self-examination services for psychological problems. So far this service has been used by around 1,522 users. The three psychological problems encountered were anxiety, depression, and psychological trauma. The number of service users showed that 63% of them experienced anxiety and 66% depression.[15]

Medical students have the opportunity to take part in this, of course by being trained by professionals such as psychiatrists. Students are pioneers with the knowledge they possess and high social commitment, making it possible to join in various formal activities and volunteer to work together during and after this crisis.[16] A patient-centered approach ensures that they have professional competence, safety, and efficiency through each phase of care and beyond. Therefore, this literature review needs to examine the role of medical students in anticipating the psychosocial impact of the COVID-19 pandemic.

Method

In this paper, the author uses a narrative review method to study the role of medical students in anticipating the psychosocial impact of the COVID-19 pandemic.

The main and supporting articles are search results from indexed international journal databases such as Pubmed, ScienceDirect, and Google Scholar search engine. The keywords used are COVID-19, medical education, medical student, post-pandemic, and psychosocial. The reference inclusion criteria used are original research and meta-analysis published in medical and health journals. Criteria for literature searches for main articles are articles that can be accessed openly, in English, EBM articles of at least level 3, and published less than the last 5 years.

Discussion

Medical Education During and After the COVID-19 Pandemic

Students who are competent and have high social commitment can be invited to work together during and after this crisis period. A patient-centered approach can presumably ensure that they have prior professional competence, safety, and commitment including knowledge of the patient, diagnosis, intervention, and follow-up. Therefore, it is necessary to review the requirements for participation, not forgetting that for all health teams (including students), patients are a shared and primary responsibility.[17]

It is important to note that, due to the severity of the health crisis, students should be trained to become health professional reserves who can take action, especially in resolving psychosocial problems that occur, at least as promotive and educational personnel who respond quickly in various conditions.[16,18]

The COVID-19 pandemic has changed dimensions and lifestyles. Online mode has become the primary means of obtaining up-to-date information and continuing medical education while maintaining social distancing. However, these benefits may not be generalizable to all forms of online teaching such as recorded lectures. Providing classical written material or note-taking, limited interaction and discussions with other students are important challenges for online learning.[19]

In the wake of the COVID-19 pandemic, medical schools can evaluate what was learned during the pandemic to create new opportunities and further faculty development. Baker et al. Divide the four themes driving post-pandemic faculty development into four themes: (1) Faculty development must better support work-life balance; (2) Academics must re-evaluate promotion processes, including tenure and promotion timing, and Recognition of other scholarly activities beyond peer-reviewed publications, especially for women and underrepresented faculty; (3) The need to better leverage community engagement and learning through expanded dialogue and collaboration as community organizations There may be similar goals. (4) Information sharing should be expanded to the global community, and faculty development can create avenues for opportunities, collaborations, and open dialogue beyond campus to validate and corroborate research and scholarly activities.[20]

A hybrid approach that combines face-to-face teaching with online learning can leverage the best of both approaches. Lessons learned from virtual learning for faculty development include setting realistic expectations for program development since time, technology, and resources may be limited.[21,22] Even now, Indonesia itself has implemented full face-to-face lectures in line with the elimination of the COVID-19 pandemic status. This is also a breath of fresh air for medical education in Indonesia.

The Role of Pre-Clinical Stage Medical Students in Addressing Psychosocial Problems in the Pandemic Era and Post-COVID-19 Pandemic

Medical students can take part in supporting the dissemination of scientifically based information to the public about disease prevention measures. Includes nutritional, physical, and emotional health strategies during the isolation period.[16] Students are encouraged to actively participate in identifying accurate, scientific evidence-based information about the pandemic while producing audiovisual or textual content that can be disseminated through various means of communication. Ensure the correctness of the information circulating and prevent the spread of hoaxes, both regarding medical matters and other matters in general. This problem becomes serious because during the pandemic everyone becomes intense with technology.[23,24]

The rise of fake news and rumors is a factor that worsens the quality of people's welfare and mental health which will have an impact on poor health.[24] The public should limit excessive acquisition of information from news whose truth is not yet known, the public also needs to sort information by obtaining it from trusted sources.[23] Apart from that, to maintain mental health and overcome various emotions, medical students are also advised to educate the public to carry out simple

activities, for example by relaxing by breathing or by doing light exercise.[25]

Students together with stakeholders can also create a database of national and international activities where students work to support the health team and share it with other students at medical institutions. Students have the capabilities needed to design and build information storage (databases) so that they can obtain an overview of the cases that occurred and the psychosocial dynamics experienced by the community so that the interventions carried out can be more optimal and by the reality of what is happening.[26,27]

Students through organizations can also create support teams for students that reduce the physical and social impacts of isolation. Creating groups with various functions, such as sessions for academic counseling and sharing cases encountered virtually, meetings to provide mutual emotional support, a "Check-in" network system for classmates who want to ensure each other's well-being, as well as other initiatives organized by students for students through a group under supervision by practitioners to equalize perceptions about everything that happens.[28]

It is hoped that students can help each other and collaborate safely and comfortably to produce policy outcomes in their respective regions that meet expectations. Caring for and protecting the population, making colleagues feel safe, ensuring that the information received by the public does not increase anxiety under strict supervision, and reminding family doctors of previous involvement are optimistic steps that can be taken.[20,29]

Support activities for health workers can be carried out, such as campaigns and educating the population about clinical warning signs so that they can seek medical help. Includes a 24/7 hotline for online consultations and community-based webinars for mental health education. The students who are responsible here can not only help provide direct understanding to the public regarding information about the outbreak, but they can also develop their soft skills such as communication, negotiation, public speaking, leadership, and so on before entering the field and the professional world.[22]

Activities can be carried out online by utilizing social media and cell phones or offline through house-to-house promotive preventive activities held with the Community Health Center and Regional Hospital.[30] Students can also provide recommendations regarding the referral flow for cases with risk factors or complications found during the intervention. The students involved can detect, even remotely, relevant signs and symptoms to decide to refer a patient to second or third-level care.[31,32]

As active learners, medical students should create clinical discussion groups. To develop clinical competencies related to critical thinking and decision-making, students are also encouraged to review, analyze, and discuss clinical cases including their consequences for the current psychosocial dynamics arising from the pandemic. Analyzing, summarizing, and distilling vast information about an emerging outbreak is a small thing that has a big impact.[33,34]

Hundreds of articles, protocols, guides for managing the disease, news and reviews can be published every week. Systematic reviews of scientific evidence, publications and case reports, and scientific analyses performed can update data and assist healthcare professionals on the front lines of patient care about diagnosis, rehabilitation, and internal-external factors influencing the success of therapy.[12,35] The concept of interprofessional education is important to make these various ideas a success. Medical students can attract colleagues from other departments or non-medical professionals.[36]

The Role of Clinical Stage Medical Students in Addressing Psychosocial Problems in the Pandemic Era and Post-COVID-19 Pandemic

A key characteristic of clinical education is that students develop in a real professional environment, spanning first contact with patients in the outpatient setting through to hospital care, surgery, critical care units, and emergency rooms.[34,37] Each student has varying clinical settings and perspectives, depending on what stage of education the student is in and their level of responsibility in decision-making. Therefore, analysis of student participation during activities must be based on academic grades and the level of proficiency in clinical competencies that students had before joining to maintain the quality of service.[38,39]

Student activities must be supervised by clinical experts and ensure their safety with appropriate personal protective equipment. To direct students in making diagnostic decisions and therapeutic actions, students must follow the clinical observation algorithm with clinicians who treat patients with severe psychosocial disorders during the pandemic. During medical procedures, clinical stage students can provide emotional support to the clinician who is carrying out

the medical procedure in addition to the patient and their family as the main focus of care.[40]

Students will learn to develop resilience, empathy, and leadership skills by contributing positively to the medical procedures provided. Doctor-patient communication can be improved by observing and communicating with family members and the patients themselves, providing emotional support to them, and providing an accurate understanding of the outbreak to overcome anxiety.[41]

Then, clinical students together with preclinical students who have been trained and under the supervision of a hospital or community health center can carry out screening to the community according to the directions set on a regional basis.[42] Students can also remotely follow up on patients who are diagnosed with COVID-19 but do not require hospitalization. Supports patients and their families as well as professionals through follow-up reports that enable the expert nurse on duty to know the patient's situation.[43] Students can develop and strengthen clinical knowledge of evaluation, monitoring, and detection data that indicates disease that requires transfer of patient care to a hospital or emergency health center. Remote follow-up of outpatients who are isolating at home during the recovery phase of the disease.[38]

Students can monitor health status, provide emotional support, and become an extension of the doctor during this time. This activity can be carried out online or offline at the hospital or clinics closest to the students and is still carried out under the supervision of professional staff to minimize mobilization between regions to reduce the possibility of transmission.[44]

Conclusion

The return of students to clinical areas must be supervised very carefully by lecturers and educational institutions, in this case, medical faculties, providing extraordinary training opportunities for students' professional and personal development, as well as realizing good collaboration with the social environment to create prosperity for all ages. especially psychosocial support after the pandemic. Solutions that include a holistic approach based on community intervention make it very possible for medical students to minimize psychosocial impacts to build a life structure that is in line with the WHO definition of health, physical, mental, and socially healthy to realize the 2030 sustainable development agenda.

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