

**HEALTHCARE STUDENTS' PERCEPTION AND OPINION ON COVID-19
RELATED TREATMENT PRIORITIZATION**

EVANGELOS KAZAKOS

University of Western Macedonia, Ptolemaida, Greece

aff00151@uowm.gr

NIKOLETA LEVENTI

Medical University, Sofia, Bulgaria

n.leventi@foz.mu-sofia.bg

ALEXANDRINA VODENITCHAROVA, KRISTINA POPOVA, STEFAN VELIKOV,

ANTONIYA YANAKIEVA, KRASIMIRA MARKOVA

Medical University, Sofia, Bulgaria

Abstract

During the COVID-19 pandemic several social, economic and ethical concerns have emerged that require a complex approach in order to not relinquish fundamental moral standards. The aim of this paper is to explore health sciences students' opinion on ethical dilemmas related to Covid-19 treatment provision. For the purpose of our study, a cross-sectional survey was conducted among 715 preclinical year healthcare students. The participants were medical students from Medical University-Sofia, Bulgaria and midwifery students from the University of Western Macedonia, Greece. Overall, 50% of students regarded prioritization of treatment based on resource availability in ICUs as ethical, whereas 32% of those questioned consider this approach as contradictory to their perception of ethics. Regarding prioritization of treatment in ICU and hospitals based on either age or profession, students either marginally (39%) or categorically (85%) do not adopt such criteria as ethical. This study clearly demonstrates that treatment prioritization must remain ethically prohibited based on non-medical criteria such as the patient's profession and age. Ethical support, collegiate decision-making in partnership with the patient, and simulation-based training, especially in the context of the current pandemic, may be used to overcome similar concerns in order to improve systemic responses in future crises.

Keywords: treatment prioritization, ethics, students' perception

Introduction

As of April 2020, severe acute respiratory syndrome coronavirus 2 SARS-CoV-2, the causative agent of COVID-19, accounted for more than 251 million infections and more than 5.1 million deaths worldwide, changing the lives of individuals and societies in an unprecedented manner. Early in the course of the pandemic social, economic and ethical concerns related to the adoption of critical public health protection measures to mitigate viral transmission, facilitate detection and management of infected individuals, have emerged. An unprecedented rise in the influx of patients in Intensive Care Units (ICUs), with variable levels of critical conditions, led to the need to apply triage policies in prioritizing patients as per their needs and conditions. This context necessitates a multistep balanced approach in order to avoid major social distraction and, most importantly, to align an effective global COVID-19 response which complies with core human rights principles and does not relinquish fundamental moral standards. In this regard, drawing lessons from the current crisis is essential in order to formulate fit public health services by improving long term preparedness, planning and competencies in line with the protection and respect of human rights. This project aims to explore health sciences students' responses to specific challenges related to the ethical dilemmas encountered during COVID-19 treatment provision.

Methods

For the purpose of our study, a cross-sectional survey was conducted among 715 preclinical (1st and 2nd) year healthcare students. The participants were medical students from the Medical University-Sofia, Bulgaria and midwifery students from the Faculty of Midwifery - University of Western Macedonia, Greece. All respondents participated anonymously and voluntarily. Data was collected between April and July 2020 by applying a web-based questionnaire, administered in Bulgarian and English language accordingly. The questionnaire, composed of 21 questions on socio-demographic characteristics, symptoms and treatment of COVID-19, tested the students' familiarity with the terms self-quarantine and isolation, as well as their knowledge about the transmission of COVID-19 and the hygiene measures that help prevent it. Further questions confronted the survey participants with moral dilemmas related to treatment prioritization based on age, profession and resource availability in Intensive Care

Units (ICUs), stigmatization related to COVID-19, and human rights restrictions during the pandemic. Data analysis was conducted using established statistical analysis methods.

Results

A total of 715 participants enrolled in the study successfully completed the questionnaire. The sample primarily consisted of females (85%). Overall, 50% of students regarded prioritization of treatment based on resource availability in ICUs as ethical, whereas 32% of those questioned considered this approach as contradictory to their perception of ethics. Regarding prioritization of treatment in ICUs and hospitals based on either age or profession, students either marginally (39%) or categorically (85%) did not adopt such criteria as ethical, irrespective of reduced capacity or transient resource shortages. Interestingly, inability or reluctance to assess both subject scenarios was significantly high among participants, irrespective of their nationality or their field of studies.

Conclusions

During emergencies and disasters, decisions on priority setting and the fair rationing and allocation of limited resources are an established practice employed on medical criteria, namely an expected positive benefit/risk ratio. However, those decisions may still be hampered given the existence of competing approaches on justice and social welfare.

This study clearly demonstrates that treatment prioritization must remain ethically prohibited when based on non-medical criteria such as the patient's profession and age – otherwise it is considered as discriminatory or arbitrary by the students.

The high percentage of students that refrained from stating a clear position on the aforementioned issues demonstrates that healthcare workers face ethical dilemmas stemming from a disproportionate share of operational responsibilities. Ethical support, collegiate decision-making in partnership with the patient, and simulation-based training, especially in the context of the current pandemic, may be used to overcome similar concerns in order to improve systemic responses in future crises. Furthermore, it emphasizes the importance of integrating medical ethics teaching early in the course of health sciences schools curricula, in order for students to respond competently whilst facing considerable moral distress.

Attributing resources when they are insufficient remains a public health issue with serious ethical implications, which deserves to be evaluated collectively, and in this respect it is imperative to collect feedback from health profession students in order to assess the consequences of prioritization decisions.

This preliminary study contributes towards a better understanding of the educational needs related to ethics in future public healthcare workers and showcases the value of people with different backgrounds and skillsets in shaping a diverse and multidisciplinary public health sector.

REFERENCES

- Arora, A. and Anmol Arora.** (2020). Ethics in the age of COVID -19. – In: *Internal and Emergency Medicine*, 15: 889–890.
- Huxtable, R.** (2020). COVID-19: where is the national ethical guidance? – In: *BMC Med Ethics*, 21: 32.
- Kooli, C.** (2021). COVID-19: Public health issues and ethical dilemmas. – In: *Ethics, Medicine and Public Health*, 17.
- Leclerc, Th., Nicolas Donat, Alexis Donat et al.** (2020). Prioritisation of ICU treatments for critically ill patients in a COVID-19 pandemic with scarce resources. – In: *Anaesthesia Critical Care & Pain Medicine*, 39: 333-339.
- World Health Organisation.** (2020). *Addressing Human Rights as Key to the COVID-19 Response*.