

Lessons learned in medical students' remote social responsibility experiences during COVID-19 pandemic

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ABSTRACT

Background: With the declaration of the COVID-19 pandemic in March 2020, face-to-face medical education was interrupted. To make first-year students a part of the fight against the pandemic, "We, as well, are in the Fight Against Novel Coronavirus Disease (COVID-19)!" remote social responsibility project was implemented in May 2020.

Aim: The aim of the study was to evaluate the perceptions and opinions of medical students regarding their remote social responsibility experiences during the COVID-19 pandemic.

Methods: Thematic content analysis of short-written reflection data collected to provide a deep insight into the experiences of the medical students was carried out. **Results:** The meaning and achievements of the remote social responsibility project revealed seven themes: "perception of social responsibility", "perception of being medical students", "perception of being a physician", "fight against the pandemic", "affective achievements", "acquisition of generic skills" and "corporate commitment". The findings draw attention to understanding the meaning of social responsibility, medical students' and physicians' role and responsibility in protecting health during the pandemic.

Conclusion: Medical students providing social responsibility opportunities for their students during the pandemic enables them to be a part of the fight against the pandemic and ensure important gains. These gains also valuable in preparing them for pandemics and similar emergencies in their future professional lives. In addition, competencies such as communication in crisis environment, access to evidence-based information, informing the society that will prepare for crisis situations should be gained in the medical education.

Keywords: Covid-19 pandemic, social responsibility, medical students.

INTRODUCTION

Physicians' social responsibilities have become a prominent topic in the fight against health problems and crises on a global scale. The motivation of physicians to feel responsible and accountable to society has led to the increasing importance of the issue in medical education. Medical education and practice should be sensitive to the social determinants of health and vulnerable and marginalized people [1]. Medical schools should offer opportunities during medical education so that the students internalize the concept of social responsibility and engage in behaviors that will benefit society. Students can learn by experiencing the needs and expectations of society in different social environments and fulfill their responsibilities in an organized manner. Social responsibility training ensures not only students but also medical schools are accountable to the society, integrating with the society [2].

The New Coronavirus Disease (COVID-19) was declared as a pandemic by the WHO on March 11, 2020. The COVID-19 pandemic has directly affected medical education. Lockdowns, meeting restrictions and the withdrawal of students from educational and clinical environments have forced medical schools to produce a series of educational innovations. One is the continuation of voluntary social responsibility activities to support health systems [3]. Students working on volunteer projects emphasized that making an active contribution in this challenging time rather than staying at home made them feel good [4].

In Hacettepe University Faculty of Medicine (HUFM), the "Becoming a Physician and Social Responsibility" (BPSR) program has been implemented for first-year medical students since 2018. The program aims to develop social responsibility awareness and sensitivity by planning and implementing a social responsibility project (SRP). SRPs are planned and implemented in small groups under the guidance of a facilitator. In the 2019-2020 academic year, by the declaration of the COVID-19 pandemic, face-to-face education was interrupted and first-year students had to stay at home due to legal legislation. Most of the SRP groups could not complete the field study of the SRPs they planned. "*We, as well, are in the Fight Against Novel Coronavirus Disease (COVID-19)!*" project has been developed as part of the BPSR

Program to make first-year medical students a part of the fight against the COVID-19 pandemic.

It was aimed to evaluate the perceptions and opinions of medical students regarding their remote social responsibility experiences during the COVID-19 pandemic.

MATERIALS AND METHODS

Participants

The study group comprised first-year students (n=479) at HUFM in the 2019-2020 academic year.

Remote Social Responsibility Project

The objectives of the Project were to inform the students about pandemics, enable them to understand the importance of evidence-based information and allow students to have an experience of informing the public about the pandemic by using social media platforms [5]. Project activities were planned in the SRP groups under the guidance of facilitators, but the target groups were informed simultaneously by the students individually. It was aimed to inform four target groups:

- general public
- 65 years and older and individuals with chronic diseases
- teenagers (children staying at home-adolescent)
- women who have just given birth

Reminders (14 pieces), infographics (5 pieces), video (Arabic with English subtitle), and story visualization materials have been prepared by an expert group. The translation of infographics into six different languages (English, Arabic, Albanian, Greek, Azeri, and Swahili) was carried out with the students' contribution to enable international students to share in their own countries (Annex-1). Due to social life constraints, all students informed the target groups using these materials in May 2020 through social media communication channels such as Instagram, Facebook, and WhatsApp. When students couldn't reach the target groups via social media, students informed them by

phone. All materials were shared simultaneously on the HUFM website. After completing the project activities, the students were asked to complete a written reflection assignment about their project experiences. The students were asked to answer the following question:

- Explain the meaning of the "We, as well, are in the Fight Against Novel Coronavirus Disease (COVID-19)!" project experiences and its contributions (To include both your feelings and thoughts).

Four hundred twenty-eight students (89.3%) submitted their written reflections.

Analysis of written reflection data

Written reflection allows students to relate their experiences with their thoughts, feelings, and values in a meaningful way. It also enables educators to examine learners' emotions, exciting experiences, and learning areas [6]. In the study, qualitative analysis (thematic content analysis) of written reflections was conducted to gain deep insight into students' experiences.

Two researchers (MD and BA) conducted the analysis. The dataset was created by combining all written reflections. Thematic content analysis was performed, as described in Table 1 [7].

Ethical consideration

The written reflections of the students were retrospectively analyzed after completing the BPSR program. Reflective writings were accessed through the educational portal (Blackboard) with institutional written permission. Identity information was kept confidential at all stages of the study.

Table 1. Thematic content analysis stages

Phase	Description of the process
1	Reading of the raw data (dataset) and gaining a general understanding
2	Coding interesting features of the data in a systematic fashion
3	Collating codes into potential themes
4	Generating a thematic 'map' of the analysis
5	Generating clear definitions and names for each theme
6	Producing a scholarly report of the analysis.

RESULTS

As a result of the thematic content analysis, we identified seven themes, 53 codes, and 806 data extracts. The explanations of the participants are related to the following themes, respectively: "perception of social responsibility", "perception of being medical students", "perception of being a physician", "fight against the pandemic", "affective achievements", "acquisition of generic skills" and "corporate commitment" (Figure 1).

We used the SRP group (G) and participant (P) numbers when sharing the quotations.

Perception of social responsibility

It was widely stated that experiencing SR in an extraordinary situation helped them understand the importance of SR during the pandemic and showed that SR activities could be carried out in any environment and at any time, even without face-to-face. Students perceived this experience as a satisfying experience. The fact that students receive positive feedback from the target groups after sharing and that more information is requested from them can be effective in this perception.

It is very proud to be doing such a project in these days when it is essential to inform people correctly. I think that each feedback is proof for us of how valuable and important this Project is. I realized how human life can be saved with a simple precaution and sensitivity. (G33, P6)

Perception of being a medical student

Medical students who must stay at home and continue their education remotely perceive their

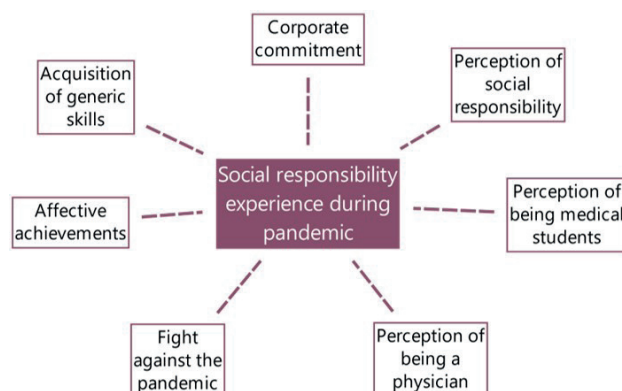


Figure 1. Meaning and gains of the SRP experience during the COVID-19 pandemic

SR experience as contributing to the fight against the pandemic. They stated that this experience improved the medical students' understanding of their role and responsibilities in informing society in extraordinary situations. The positive feedback from the target groups made them feel that medical students are trusted in society. They think that SRP experiences contributed to the development of medical student identity.

As a medical student, I felt in a status that informs and raises awareness of society for the first time. It was good preparation as I will continue in this way when we become a doctor in the future. (G2, P11)

Perception of being a physician

The students mentioned this experience helped them better understand the principle of the medical profession is to protect and improve the health of people/society and the responsibility of physicians toward society as well as the patients (individually). They emphasized the importance of sharing evidence-based information against misinformation and that this project increased their awareness of the physician's role in informing society.

The most crucial gain that the social responsibility project brought me is that I realized that the physician's mission is not just to treat. At such times when information pollution is at its peak, it is our responsibility show the society how to protect themselves and their lives while preventing panic and allowing the public to access reliable information. (G3, P13)

Fight against the pandemic

Students stated that their SRP experiences primarily contributed to their knowledge about the COVID-19 pandemic. Some students also emphasized that it motivates more research on COVID-19. Students understood the power of social media in reaching target groups (elderly, adolescents, etc.) and informing them about the pandemic. Their awareness of the use of these platforms for educational purposes has increased. This experience was valuable as it allowed them to communicate with people, understand them and socialize simultaneously during isolation at home.

I enjoyed using the educational part of social media during the pandemic. I don't think social media is a

completely time-consuming platform anymore. (G4, P9)

Affective achievements

The SRP experience has been perceived as a valuable experience that supports the health care providers working actively in the field. Students defined their affective achievements by using expressions such as enjoying and feeling like a physician. They stated that it increased their self-confidence, sensitivity to people and the environment and created a desire to better prepare for their profession. One student commented that her experiences made her realize the difficulty of changing people's behavior (wearing a mask).

While we were staying at our homes, residents, professors, nurses, health technicians, and many more people in the field of health risked their lives and worked for us. While working in those difficult conditions, I participated in such a social responsibility project. Although we could not inform people face-to-face, at least it is precious to lighten the burden health care system by raising awareness through informing remotely. (G6, P12)

Acquisition of generic skills

Students think that they will be able to use some gains experienced in SRP, such as communicating with people (written and verbal), informing society, and approaching target groups (elderly, pregnant, etc.) in their professional life in the future. Some students express it as an important gain to experience remote planning and execution of SRPs that aim to reach large target audiences in extraordinary situations such as pandemics.

Raising my father's awareness was what the Project indirectly contributed to me. In that process, I realized that some people who do not follow the rules know what they are but do not want to accept them. I learned how to explain (G13, P2)

Corporate commitment

Students perceive it as effective and reliable to share the information prepared by experts for society with the logo of their school. This approach was described as proud by some students. At the beginning of the pandemic, their school's effort to inform society with its social responsibility approach and the inclusion of its students were expressed that increased corporate commitment.

I am still a first-year medical student, and due to the pandemic, I could not spend any time in medical school, so I could not feel enough commitment to the faculty. During the Corona pandemic, my being seen as a member and representative of this faculty and being given a task made me feel the sense of belonging that I felt lacking. (G30, P6)

Two students emphasized some negative experiences while informing the public. These are "people not to care enough; failure to prevent the spread of misinformation; to be late in sharing and in being passive in the project."

DISCUSSION

It was aimed to evaluate the meaning and gains of a SRP developed rapidly in the context of the pandemic and implemented remotely for medical students.

Students think their experience to be purposeful, valuable and fulfilling although they are more passive than their active roles in face-to-face SR training. Informing the people about the pandemic is seen as an important gain. For example, wearing a mask is necessary for the safety and health of other people around and personal protection. There are values and perceptions that shape the personal decisions of individuals in society about whether to wear a mask [8]. Complex/complicated, contradictory, or false information can also be spread during the pandemic. The fight against infodemi, which is also defined as misinformation arising from the abundance of information that needs to be dealt with in society, comes to the fore as a requirement of health advocacy [9]. This becomes even more important if the health literacy of the population is low [10]. In the study, students primarily understood that it is important for society to have evidence-based knowledge in terms of showing safe behaviors in the information pollution experienced in the case of a pandemic. Students experiences on informing the target groups enables them to be a part of the fight against the pandemic.

The COVID-19 pandemic has led to the debate of the role of medical students during the pandemic [11]. Health sciences students stated that voluntary participation in a pandemic is a moral/ethical/professional obligation, and it is necessary to be encouraged to volunteer [12]. The active

participation of medical students voluntarily with an individual choice can provide useful knowledge and skills about flexibility, tolerance to uncertain situations, professional identity development, motivation to learn, and awareness and risk assessment [13]. However, it should not be forgotten that participation with limited knowledge may lead to psychological concerns, ethical problems, and even legal obligations [14]. Voluntary student participation in SR activities during the COVID-19 pandemic positively affected students' social skills and made them feel happy, enthusiastic, valuable and useful to society [15]. Such activities make the individuals in the society feel safe and increase the feeling of trust and gratitude towards the physician [16,17]. Differences between volunteering and service-learning approach are discussed in the literature. While the main focus in volunteering is the service provided, in service-learning, it is the learner's experiential learning [18]. We tried to establish a balance between providing service to society and reaching the learning goals of the learners. The findings of the study support that the learning outcomes were achieved in terms of students. They also support the literature findings [15-17,19].

Students think that their experience improves their awareness and understanding of the physician's responsibility to society and his role in protecting health. These achievements are primarily related to the physician's health advocacy role. Health advocacy becomes even more critical in extraordinary situations such as the pandemic. By implementing purposeful programs on advocacy for ordinary and extraordinary situations, medical schools can better prepare students to meet the challenges they may face as physicians [20].

The study group consists of first-year students restricted from leaving home due to their age and continuing their medical education remotely online. These limitations and conducting education remotely lead to isolation, decrease in social interaction and communication [21]. In the study, students see their experiences as enhancing their social interactions by communicating with people on social media and by phone when necessary. Students' social interaction led them to understand how people were affected by the pandemic and think about how to reach and communicate with target groups (elderly, adolescents, and pregnant

women). Social empathy is 'the ability to understand people more deeply by perceiving or experiencing life situations and, as a result, gain insight into structural inequalities'. Social empathy consists of three elements: individual empathy, contextual understanding, and social responsibility [22]. The COVID-19 social responsibility experience of the students can be considered as an opportunity provided to them in this context.

Pandemic is a period when people tend to unite and support each other in society and learn to do this from a distance. Social media allowed learning communities to share their experiences and good practice examples [23-26]. The use of social media for educational purposes has the benefits of interaction in information transfer, equal participation of the parties in the education processes and real-time information exchange [27,28]. Characteristics of Generation Z (born in 1997 or later) that make up the study group; "hyper-connected to computers and the internet," "have global expectations of learning opportunities," and "active problem-solvers, independent learners, and social justice advocates" [29]. Health professional educators need to accept this generation's unique characteristics and carry social media into learning environments [30]. In the study, first-year medical students were encouraged to use social media to disseminate accurate information. Experience in using social media for SR activities can be considered a significant gain.

In the study, sharing the information with the corporate logo was seen as self-confidence and strengthening corporate belonging. It is thought that SR activities will increase the corporate commitment of not only students but also educators [31].

Medical schools should prepare graduates for clinical and non-clinical roles in ordinary and extraordinary situations [21,32]. However, public health emergency preparedness education is not sufficiently included in medical education [33]. In most public health emergencies, such as the pandemic, event-specific "spontaneously" training is not always possible [34]. Hall et al. drew attention to adaptive strategies for learning and expanding learning paths using digital technologies in maintaining medical education during the pandemic [35].

CONCLUSION

As a result, the gains of the SRP, which aims to make first-year medical students a part of the fight against the COVID-19 pandemic; can be summarized as understanding the importance of social responsibility, the role of the medical student and physician during the pandemic, the fight against the pandemic, acquisition of generic skills and affective achievements and strengthening corporate commitment. In the study, students think that their medical school act quickly and responsibly towards society during pandemic, and they find it very valuable that they are involved in these process. It is also valuable in preparing them for pandemics and similar emergencies in their future professional lives.

Research findings drew attention to the development of medical curricula for graduates who are better prepared for public health emergencies. Competencies such as communication in crisis environment, access to evidence-based information, informing the society that will prepare for crisis situations should be gained in the medical education.

The study's strength is a qualitative study that allows students to reflect on their perceptions and thoughts. However, it was conducted only in one medical school and only included the students' opinions.

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Author contribution

Study conception and design: MD, BA, and DA; data collection: MD, BA, and DA; analysis and interpretation of results: MD, BA, and DA; draft manuscript preparation: MD, BA, and DA. All authors reviewed the results and approved the final version of the manuscript.

Ethical approval

The study was approved by the Hacettepe University Non-Interventional Clinical Research Ethics Board (Protocol no. GO 21/360 / March 16, 2021).

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Conflict of interest

The authors declare that there is no conflict of interest.

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Annex 1. Materials of the “We, as well, are in the fight against COVID-19!” Project

Material type (number)	Content	Language
Reminder (14)	<ol style="list-style-type: none"> 1. General Information on COVID-19 2. Proper Hand Washing 3. Social / Physical Distancing! 4. Wearing Face Masks Properly 5. Risk Groups 6. COVID-19 and Adolescent-1 7. COVID-19 and Adolosanes-2 8. COVID-19 and Adolescent-3 9. COVID-19 and Tobacco Use 10. COVID-19 and 65 Years of Age and Older People 11. 10 Recommendations for Children, Adolescents and Parents 12. COVID-19 and Breastfeeding 13. COVID-19 and Foods 14. COVID-19 and Correct Information Sources 	Turkish
Infographics (5)	<ol style="list-style-type: none"> 1. Social / Physical Distancing! 2. Wearing Face Masks Properly 3. COVID-19 and Tobacco Use 4. COVID-19 and 65 Years of Age and Older People 5. 10 Recommendations for Children, Adolescents and Parents 	Turkish English Arabic Albanian Greek Azeri Swahili
Video (1)	Messages from HUFM Phase I Students	Arabic with English subtitle
Video (2)	Narrative; “Pathetic End of Novel Coronavirus”	Turkish