

ORIGINAL ARTICLE

The Economic and Psychosocial Burden of the COVID-19 Pandemic among Paramedic Candidates

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ABSTRACT

Objective: The aim of the present study was to investigate economic burdens and the psychosocial impact of the COVID-19 outbreak on paramedic candidates in Turkey.

Methods: This cross-sectional descriptive study was conducted on paramedic candidates in Turkey from January to May 2021. Students studying in the paramedic program in Turkey were included in the study. A self structured questionnaire was developed. Relatives leaving work, state support status, purchasing power for basic food needs evaluated the economic and psychosocial burden of the participants with the variables. The researchers developed a data collection tool consisting of three parts based on the current literature. The first part evaluated descriptive characteristics, the second part the economic effects of COVID-19, and the third part the psychosocial burden of COVID-19.

Results: Of 1327 candidates, the average age was 20.41±2.08 years. There were 963 (72.6%) females and 364 (27.4%) males. During the pandemic, 933 (70%) and 784 (59.1%) felt responsible for grocery shopping for relatives and neighbors aged ≥65 years. Moreover, 1099 (82.8%) of the participants left their homes as rarely as possible; 784 (59.1%) were unhappy with staying at home all the time; 623 (46.9%) became more interested in religion, spirituality, and philosophy during the pandemic; 473 (35.6%) of the participants' income did not meet their expenses, and 696 (52.4%) indicated that their academic performance had deteriorated.

Conclusion: The COVID-19 pandemic has affected the behaviors, lifestyles, habits, academic performance, and therefore the lives of the paramedic candidates due to additional burdens.

Keywords: COVID-19, Economic Burdens, Pandemics, Paramedic.

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INTRODUCTION

The emergence and spread of the novel coronavirus (COVID-19) has resulted in a global public health crisis.^{1,2} After the World Health Organization (WHO) declared the COVID-19 outbreak a global emergency on January 30, 2020, countries had to take various measures such as closing borders, imposing travel restrictions, and quarantine requirements.³⁻⁵ When these measures proved to be inadequate and the virus continued to spread, more strict measures were taken, such as curfews. The uncertainty surrounding the COVID-19 pandemic has promptly disrupted global trade and supply chains, reduced commodity prices, and forced multinational companies to make critical decisions based on limited information.⁶ These critical decisions have deeply affected daily life and have had serious economic, health, and psychosocial consequences.⁷ Despite quarantine and curfew measures, healthcare

professionals are at high risk of infection due to the nature of their jobs.^{5,8} Healthcare systems in developed and developing countries face severe difficulty, and frontline healthcare workers continue to work under enormous pressure to contain the spread of the novel coronavirus.⁸

Due to the sharp increase in the number of COVID-19 patients worldwide, many countries have considered allowing senior healthcare students to graduate early to join the workforce.⁹ Similarly, the literature suggests that student paramedics who are not actively working for an ambulance service may be asked to join the intensified efforts.¹⁰

As with all infectious diseases, frontline healthcare workers, including paramedics, are at increased risk of contracting COVID-19, and the psychosocial readiness of paramedics and paramedic candidates is of great importance for the effectiveness of the efforts against the pandemic. It is noticed that health workers and

individuals who are candidates to be health workers are in a complete psychosocial and economic well-being, which will increase their professional motivation. In the context of all these factors, the aim of the present study was to investigate the economic burdens and the psychosocial impact of the COVID-19 outbreak on paramedic candidates in Turkey.

METHODS

This cross-sectional descriptive study was planned to examine the economic burdens and the psychosocial impact of the COVID-19 outbreak on paramedic candidates in Turkey from January to May 2021. The study was granted permission by the Republic of Turkey Ministry of Health Scientific Research Studies Committee on COVID-19 and was approved by the Cappadocia University Scientific Research and Publication Ethics Committee. In addition, the participants were asked to approve the consent form on the first page of the data collection form. Those who did not approve the consent form were not included in the study. Paramedics are health workers who provide pre-hospital health care in Turkey. Paramedic students in Turkey were included in the study. The sample selection method was not used and it was shared on social media accounts that 16 hours of trauma training would be given to those who wanted to participate in the study. In this way, it was aimed to increase the number of adult group participants. The study included a total of 1412 paramedic candidates who were enrolled in paramedic programs in Turkey and who filled out an online form (Google Forms). This study was announced through social media such as Instagram and Facebook. Those who wanted to participate in the research were directed to google forms by clicking the relevant link. In the preliminary assessment, 85 participants were excluded due to incomplete data, and the final analysis included 1327 participants.

The researchers developed a data collection tool consisting of three parts based on the current literature. The first part (7 items) evaluated descriptive characteristics (age, sex, place of residence etc.), the second part (6 items) the economic effects of COVID-19 (relatives leaving work, state support status, purchasing power for basic food needs etc), and the third part (17-item, 5-point Likert-type; 1 = strongly agree, 5 = strongly disagree) the psychosocial burden of COVID-19. To assess the psycho-social effects, 17 different social situations (such as social media usage rate, social support to individuals aged 65 and over, religious addiction) were added to the questionnaire

and the participants were asked how often they experienced these social situations.

The data were analyzed using IBM SPSS v.25. For numerical variables, the normality of the data distribution was evaluated using the Shapiro–Wilk test. The participants' year, age, sex, place of residence, smoking and alcohol use, chronic disease and psychosocial burden results were given as frequencies and percentages.

RESULTS

Of 1327 candidates the average age of the participants was 20.41±2.08 years. There were 963 (72.6%) females and 364 (27.4%) males. In addition. Majority of the paramedic candidates were resided in a province as compared to district 517 (39.0%) and rural 207 (15.6%). Paramedic candidates were mostly non smoker 1055 (79.5%) and also did not take alcohol 1176 (88.6%), very few candidates had at least one chronic disease 133 (10.0%). (Table 1).

Majority of the participants reported that they did not lost income during the pandemic 951 (71.7%) while very few had a third-degree relative who lost income during the pandemic 130 (9.8%), 407 (30.7%) reported that their father had been laid off. Regarding income status, 693

Table 1: Sociodemographic characteristics (n=1327)

Year	n	%
Year 1	739	55.7
Year 2	588	44.3
Age		
17-20	729	54.9
21-32	598	45.1
Gender		
Male	364	27.4
Female	963	72.6
Place of residence		
Province	603	45.4
District	517	39.0
Rural	207	15.6
Smoking status		
Yes	272	20.5
No	1055	79.5
Alcohol use		
Yes	151	11.4
No	1176	88.6
Chronic disease		
Yes	133	10.0
No	1194	90.0

(52.2%) of the participants indicated that their incomes were equal to their expenses before the pandemic, whereas 473 (35.6%) of the participants' income did not meet their expenses. While 522 (39.3%) of the participants applied for government aid, 747 (56.3%) indicated that their income covered their basic needs (Table 2).

During the pandemic 933 (70%) and 784 (59.1%) of the participants felt responsible for grocery shopping for relatives and neighbors aged ≥65 years, while 809 (61%) and 638 (48%) for relatives and neighbors aged ≤20 years. During the pandemic, 1099 (82.8%) of the participants left their homes as rarely as possible; 1048(78.9%) used electronic devices to communicate

with friends whom they used to visit at home before the pandemic; 784 (59.1%) were unhappy with staying at home all the time; 623 (46.9%) became more interested in religion, spirituality, and philosophy during the pandemic; and 696 (52.4%) indicated that their academic performance had deteriorated during the pandemic. Moreover, the participants reported increased social media use during the pandemic 937 (70.6%) and indicated an increased need to call relatives who lived far away 713 (53.7%), that they were tired of spending time at home with family members or roommates 350 (26.4%), and that they constantly had problems with their family or roommates 273 (20.5%) (Table 3).

Table 2: The socioeconomic impact of COVID-19 (n=1327)

Family member who lost income during the pandemic	n	%
Mother	46	3.5
Father	103	7.8
Sibling	81	6.1
Self	16	1.2
Third-degree relative	130	9.8
Not affected	951	71.7
Family member who was laid off during the pandemic		
Mother	117	8.8
Father	407	30.7
Sibling	146	11.0
Self	22	1.7
Third-degree relative	137	10.3
None	498	37.5
Income status before the outbreak		
Income << expenses	98	7.4
Income < expenses	315	23.7
Income = expenses	693	52.2
Income > expenses	221	16.7
Income >> expenses	0	0.0
Income status during the outbreak		
Income << expenses	253	19.1
Income < expenses	473	35.6
Income = expenses	471	35.5
Income > expenses	115	8.7
Income >> expenses	15	1.1
Applied for 1,000.00 ₺ government pandemic aid		
Yes	522	39.3
No	805	60.7
Does your income cover your basic needs?		
Yes	747	56.3
No	90	6.8
Partially	490	36.9

Table 3: Psychosocial burden of the COVID-19 pandemic

Scope of the psychosocial burden	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
I feel responsible for grocery shopping For my relatives aged ≥65 years	141	10.6	73	5.5	180	13.5	475	35.8	458	34.5
I feel responsible for grocery shopping for my relatives aged ≤20 years	154	11.6	124	9.3	240	18.1	452	34.1	357	26.9
I feel responsible for grocery shopping for my neighbors aged ≥65 years	127	9.6	115	8.7	301	22.7	478	36.0	306	23.1
I feel responsible for grocery shopping for my neighbors aged ≤20 years	149	11.2	166	12.5	374	28.2	416	31.3	222	16.7
I feel the need to more frequently call my relatives aged ≥65 years who live far away	129	9.7	157	11.8	311	23.4	429	32.3	301	22.7
I feel the need to more frequently call my relatives who live far away	141	10.6	162	12.2	311	23.4	408	30.7	305	23.0
I often call or video-chat with my friends whom I used to visit frequently	110	8.3	50	3.8	119	9.0	408	30.7	640	48.2
I leave my house as rarely as possible	111	8.4	38	2.9	79	6.0	295	22.2	804	60.6
I'm unhappy with staying at home all the time	170	12.8	106	8.0	267	20.1	308	23.2	476	35.9
I'm tired of spending time at home with family/roommates	238	24.7	271	20.4	378	28.5	203	15.3	147	11.1
I constantly have problems with my family/roommates	363	27.4	324	24.4	367	27.7	161	12.1	112	8.4
I think my academic performance has deteriorated	217	16.4	114	8.6	300	22.6	303	22.8	393	29.6
I don't think my social life and relationships will be the same even after the pandemic is over	458	34.5	251	18.9	291	21.9	190	14.3	137	10.3
After the pandemic ends, the first thing I'll do is to meet my best friends and see a movie/concert/play	162	12.2	120	9.0	284	21.4	271	20.4	490	36.9
I think the pandemic has negatively affected my mental status	255	19.2	175	13.2	366	27.6	255	19.2	276	20.8
I noticed an increase in my social media use during the pandemic	158	11.9	78	5.9	154	11.6	289	21.8	648	48.8
I became more interested in religion, spirituality, and philosophy during the pandemic	182	13.7	138	10.4	384	28.9	330	24.9	293	22.1

DISCUSSION

In our study, close relatives of more than half of the paramedic candidates participating in the study lost their jobs due to the pandemic, and more than half of these were first-degree relatives of the participants. Therefore, in the present study, a very small portion of the participants experienced financial difficulties before the pandemic, while this rate increased to about one in five people during the pandemic. Two out of five people stated that they could not meet the basic needs of the family economically and applied for pandemic assistance.

The research published during the COVID-19 pandemic shows that the main factors disrupting the family economy are the closure of some institutions and workplaces, resignations, flexible working hours, and transition to the home-office system, as well as people's panic shopping following the pandemic announcement, buying more than they need.^{11,12} The paramedic candidates may also have been affected by factors involving the family economy; however, the main reasons for the financial difficulties may have been the lack of employment for the first-degree relatives of more than half of them and the restrictions on jobs due to the transition to a flexible working system for one out of every three people considering the parameters employed in the study.

On the other hand, there was no participant who chose the "income is more than expenses" option in the present study before the pandemic, which questions the income/expense balance in the pre-pandemic period and during the pandemic, while one percent of the students answered yes to this option during the pandemic. According to the data of the WHO, the demand for personal protective equipment and respirators, especially medical masks, increased 100-fold and the prices of the relevant materials increased approximately 20-fold.³ In this regard, although it is not investigated with research questions, the fact that the relatives of some paramedic candidates work in some of the relevant sectors may have resulted in an improvement in the economic situation of the family during the pandemic.

The vast majority of paramedic candidates (84.6%) stated that they stayed at home during the pandemic and went out as little as possible. This result, which also shows compliance with the legal authorities' "stay home" call, may have been due to the fact that the participants find the COVID-19 pandemic highly dangerous and perceive the control measures taken as adequate. As a matter of fact, in accordance with our

study findings, Buzzi et al.'s¹³ study of the psychosocial effects of the COVID-19 pandemic on adolescents also reported that 88.2% of students found the decisions taken by the authorities to be correct and accurate.

In the present study, a third of the paramedic candidates stated that their academic performance had decreased during the pandemic. Similar to our study findings, in the study by Buzzi et al.¹³ examining the psychosocial effects of the COVID-19 pandemic on adolescents in Italy, it was reported that the academic performance of one-third of the participants was negatively affected. In the study by Cicekoglu and Akmaz¹⁴ examining university students' point of view regarding the distance education system, it was reported that 62.2% stated that the distance education course contents/supplementary education materials were insufficient; therefore, a large majority of 70% did not want distance education to be used in all courses and continuously.

In line with other study findings^{9,15}, two-fifths of the participants think that their psychology has deteriorated during the pandemic in our study. Karatas¹⁵ stated that 62% of individuals have increased health concerns and 53.5% have increased their suspicions about disease symptoms during the COVID-19 pandemic and argued that the risk of coronavirus infection leads to a significant health concern. Li et al.⁹ reported that 26.6% of the participants experienced significant psychological distress in their study involving health program students during the COVID-19 pandemic in China.

In addition to the spatial, socioeconomic, that accompany extraordinary situations, they also increase the psychological burden by causing emotions such as unhappiness, fear, and anxiety to intensify in all individuals.¹² As is known, the variables related to the psychological state have a determining feature in the fight against the pandemic (treatment, control, and prevention). Therefore, improving and strengthening the mental health of healthcare professionals, of whom paramedic candidates are also stakeholders in crisis management, by providing sustainable psychological support will be a high-level cost-benefit approach in terms of both patients to be served and the protection of employee health safety.¹⁶

In our study, the majority of the participants (70.6%) stated that they increased their frequency of social media use during the pandemic and that they needed video calls with their distant relatives more frequently (55.0% vs. 53.7%). As in our study findings, in his study examining the social effects of the pandemic, Karataş¹⁵ reported that the increase in the time spent in the living

space during the COVID-19 pandemic caused an increase in the frequency of social media use by 59.1% and the desire to follow the news by 75.8%. Similarly, it was found that the Internet addiction level of individuals increased during the period of staying at home in a community-based study conducted by Panno et al.⁷ during the period when the pandemic peaked in Italy. On the other hand, nearly half of the paramedic candidates reported that their interest in religious, spiritual, and philosophical issues increased during the pandemic in the present study. Similar to our study findings, the study by Rababa et al.¹⁷ on death anxiety and religious coping in elderly Jordanian adults revealed that individuals increased their interest in religious rituals during the COVID-19 pandemic. Among the spiritual rituals, prayer, which is often used to manage distress and stressful situations, has been confirmed to be effective in crisis management, as it provides people with the comfort of dealing with guilt, unquestioned surrender to God's will, affirmation of illness/disease, and controlling their fears.¹⁷⁻²⁰

One-fourth (24.6%) of the paramedic candidates who are facing the dilemma of the bankruptcy/functioning of compensation mechanisms to bear the psychological, economic, burdens discussed above think that they will not be close with their friends as before once the pandemic is over, while more than half (58.3%) stated that they were planning to go to cinema/concert/theater with their favorite friends as soon as the pandemic was over. There are limited scientific research data on the subject in the literature despite the experiences and discourses about the general concerns about the prevalence and severity of addictions related to the COVID-19 outbreak emergency. Therefore, our study is important as it helps to fill gaps in the relevant data pool.

This study was completed with a few limitations. The first of these limitations is the online data collection process. As a necessity of the COVID-19 pandemic, the data were collected online. Another limitation is that the study was planned in a cross-sectional-descriptive type. The strongest aspect of this study is that it reveals the impact of the pandemic's economic and psychosocial effects on health worker candidates created a perspective for further in-depth studies to be planned. In future studies, similar studies can be planned with a larger sample group in different occupational groups.

CONCLUSION

In conclusion, the COVID-19 pandemic, which has

caused a serious change or transformation in spatial, socioeconomic, and political terms all over the world, was perceived as a "high-risk situation" by the paramedic candidates. A large proportion of the participating paramedic candidates had complied with the "stay home" orders and adopted social isolation, whereas two-thirds reported being unhappy with indoor confinement and more than half had first-degree relatives who had lost their jobs due to the pandemic and were in financial difficulty. One-third of the participants reported reduced academic performance, and the vast majority indicated increased interest in social media and religion, spirituality, and philosophy. Half of the students have hope that their conditions and social lives will improve, and about a quarter of them continue to have concerns and fears about the process.

The COVID-19 pandemic has affected the behaviors, lifestyles, habits, and therefore the lives of the paramedic candidates due to additional burdens such as increased unemployment and impoverishment, and the impact of mental health, communication, and shopping responsibility.

ETHICAL APPROVAL: The study was approved by Capadocia University Nevsehir, Turkey.

AUTHORS' CONTRIBUTION: IC: Research idea, data collection, analysis and article writing.

VS: Research design, data collection and article writing.

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