Investigating hopelessness and fear among the community during COVID-19 pandemic

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ABSTRACT

Objective: This study was conducted to determine the levels of hopelessness and fear of COVID-19 in individuals during the COVID-19 pandemic period.

Material and Methods: In this cross-sectional study was concluded Sinop Province, Turkey, from July 2020 to September 2020. The study sample consisted of 1200 individuals living in Sinop who agreed to participate in the study. An interview form was filled by the researcher for the individuals who decided to participate in the study.

Results: Of the 1200 participants, 537 (44.75%) were male, and 663 (55.25%) were female, with a mean age of 38.96. Participants had mild hopelessness (8.42%) and moderate COVID-19 fear (20.74%). There was a direct correlation between the COVID-19 Fear Scale and the Beck Hopelessness Scale. A statistically significant correlation was found between age, education, and fear of COVID-19 (respectively, p=0.001; p=0.010). A statistically significant correlation was found between the number of days the participants went out per week and income and fear of COVID-19 (respectively, p=0.001; p=0.001). There was also a significant difference between work and hopelessness (p=0.033). While there is a weak negative relationship between the fear of COVID-19 and the number of days individuals go out per week; A weak positive correlation was found with age (r=-0.109; r=0.098, respectively).

Conclusion: Due to the rapid spread of the pandemic, it was considered that policymakers and officials should develop effective behavioral strategies to reduce the mental consequences of the pandemic in society.

Keywords: COVID-19, Pandemic, Hopelessness, Fear, Pandemic

INTRODUCTION

There have been several fearsome epidemics of infectious diseases that have affected humanity's history (1). A new type of Coronavirus, named COVID-19, first appeared in Wuhan, China, in 2020 (2,3) It was declared as a COVID-19 pandemic on March 11, 2020 by the World Health Organization (WHO). COVID-19 is a beta virus transmitted to humans through close physical contact (4). The mortality rate of COVID-19 is 2.3% higher than influenza, and it is more contagious than severe acute respiratory syndrome (5,6). The most common clinical features of COVID-19; are cough, fever, shortness of breath, headache, expectoration, nasal discharge, loss of taste and smell, myalgia and diarrhea (7,8).

In addition to the increase in the death rate due to Covid-19, the psychological state of the population has also been adversely affected (9). While the individuals suffer from relatively high mortality and very high infection rate, they naturally got worried about the COVID-19, leading to fear of contacting individuals who might be infected by COVID-19 (10). Unfortunately, the disease itself may be exacerbated due to fear. All individuals worldwide have experienced high anxiety due to the emergence of the COVID-19 resulting in stigma in some cases (10-13).

Fear is one characteristic nature of infectious diseases such as the COVID-19 compared. Researhers indicates to that there is a direct association between fear and its transmission medium and rate and its mortality and morbidity, leading to other psychosocial challenges such as discrimination, stigmatization, and loss of considence (14).

Individuals with high fear levels may not think rationally and clearly in reaction to COVID-19 (15). Another important psychological effect caused by the disease is hopelessness about the future due to the risk of high mortality, the absence of a definitive vaccine and treatment method, and the failure to predict its severity and duration. Hopelessness means the feeling that any effort to make effective change in a patient's disease is ill-fated, even attempting it (16).

Under the outbreaks including the 'Ebola Virus' in the past, the community and individuals at national and international levels were majorly affected by psychosocial disorders because of the sudden outbreak of the disease. People may associate contracting the virus with fear of falling sick, hopelessness, helplessness, stigma, and even death (17).

There is limited research on the psychological effects of the COVID-19 pandemic on society. Therefore, in our study, we aimed to investigate the hopelessness and fear levels caused by COVID-19 in the society during the COVID-19 pandemic and to what extent and due to which factors the society is affected by COVID-19.

MATERIAL and METHODS

This study was carried out in Sinop province between July and September 2020. Ethics committee approval was obtained before starting the research (dated 20.07.2020 and numbered 37732058-514.10). The population of the research consisted of individuals living in Sinop. Convenience sampling technique was used as the sampling method. The data were collected by the researchers as face-to-face interview method. Among the individuals living in Sinop, 1200 individuals participated in the study on a voluntary basis, and the sample of the study consisted of 1108 individuals living in Sinop who agreed to participate in the study. The individuals participating in the study had not received any psychiatric diagnosis before and had not used any medication. Those with mental disorders such as anxiety and depression were excluded from the study. Informed consent was obtained from the individuals participating in the study.

The interview form, which was created by the researcher via scanning the literature, consisted of sociodemographic information and questions about the COVID-19 Fear Scale (FCV-19S) and Beck Hopelessness Scale (BHS). FCV-19S and the BHS were used for the general population to assess their fear and hopelessness about the COVID-19. FCV-19S consists of a five-item Likert type scale from "strongly disagree" to "strongly agree." The minimum possible score for each question is 1, and the maximum is 5. A total score ranged from 7 to 35 (18).

Beck Hopelessness Scale (BHS) which Beck et al. developed in 1974, was used to determine the individual's negative expectations of the future. Seber et al. conducted the Turkish validity and reliability study (19). In BHS consisting of 20 items, each question is scored between 0 and 1. High scores show the hopelessness high level in the individual. The participants were assessed according to their points (0-3 as Minimal, 4-8 as Mild, 9-14 as Moderate, >15 as severe hopelessness level).

Statistical analysis

Statistical analysis of the research was done in SPSS 21 program. The Kolmogorov-Smirnov test was used to test whether the numerical variables fit the normal distribution in the study, and considering that the statistical significance level was above $p<0.05$, the numerical variables were accepted to be suitable for the normal distribution. Pearson correlation coefficient test was used to examine the relationship between Beck Hopelessness Scale and Fear Scale scores. Statistical significance level was taken as $p<0.05$.

RESULTS

Of 1200 individuals participating in the study, 537 (44.75%) were male and 663 (55.25%) were female, and the mean age was 38.96 years. The age, number of individuals living in the family, number of days out per week and FCV-19S and BHS mean scores of the participants are shown in Table-1. The mean score of the Fear of Covid-19 Scale is 20.74 ± 7.03 and the mean score of the Beck Hopelessness Scale is 8.42 ± 4.31. When FCV-19S and BHS scale scores are evaluated; It was determined that the individuals participating in the study had moderate hopelessness and moderate fear of COVID-19.

Information on the participants' gender, education level, marital status, number of children, income level, job level and the presence of any psychiatric illness are presented in Table 2. The participants' 62.9% of them were married, and 91.8% of them had no psychiatric disease. 51.5% had high school degrees, 16.1% had associate's degree, 14.8% had bachelor's degree, 8.6% had primary school degree, 3.8% had master's degree, and .1% was the expert. Six hundred ninety participants (57.5%) had children. 50.4% had middle income, 26.0% had no income, 11.7% received a monthly pension, 9.8% had a good income, 1.4% had bad income, and .8% had minimum income. The 49.7% had a middle job, 29.7% had a low job, 16.1% were unemployed, and 4.4% had a high job (Table-2).

While a significant relationship was found between the age of the individuals and the fear of COVID-19 (p=0.001); There was no significant difference between age and hopelessness level (p=0.066). A significant difference was found between the education level of the participants and both the COVID-19 fear scale score and the hopelessness scale score (respectively, p=0.010; p=0.043). When the number of days out per week and the COVID-19 fear scale score of the individuals were compared, a statistically significant difference was found (p=0.001). In addition, between the income level of individuals and the COVID-19 fear scale score (p=0.001); It was found that there was a significant relationship between the occupation and the level of hopelessness (p=0.033). There was a significant negative correlation between the number of days a week that individuals went out and fear of COVID-19 (p=0.001; r=-0.109). There was a significant positive correlation between age and fear of COVID-19 (p=0.001; r=0.098). There was a negative significant difference between the income level of the participants and the level of hopelessness (p=0.001; r=-220).

Table 1. Participants' age, number of individuals living in the family, number of days out per week, and FCV-19S and BHS mean scores

Variable	X±SS (min-max)
Age	38.96±14.69 (12-92)
Number of individuals living in the family	3.61±1.20 (1-10)
Number of days out per week	4.88±1.43 (0-7)
The Fear of COVID-19 Scale	20.74±7.03 (0-35)
Beck Hopelessness Scale	8.42±4.31 (0-19)

Table 2. Information on the sociodemographic data of the participants

Variables		N (%)
Gender	Male	537 (44.8)
	Female	663 (55.3)
Marital status	Married	755 /62.9)
	Single	445 (37.1)
Presence of psychiatric illness	Yes	98 (8.2)
	No	1102 (91.8)
Educational status	Masters'	45 (3.8)
	High school	618 (51.5)
	Associate's	193 (16.1)
	secondary school	62 (5.2)
	Bachelor's	178 (14.8)
	Primary school	103 (8.6)
	Expert	1 (0.1)
having children	Yes	690 (57.5)
	No	510 (42.5)
Income status	Bad	17 (1.4)
	Lower	9 (0.8)
	Middle	605 (50.4)
	Good	117 (9.8)
	Pension	140 (11.7)
	No	312 (26.0)
Job income levels	Unemployment	193 (16.1)
	Low	357 (29.7)
	Middle	597 (49.7)
	High	53 (4.4)

Table 3. The relationship between the participants' sociodemographic data and The Fear of COVID-19 and The Fear of COVID-19 scores. *Correlation; $p<0.05$, ** 0ne-way ANOVA $p<0.05$,

Variable		
Age	P value	r
The Fear of COVID-19 Scale	0.001*	0.098
The Fear of COVID-19 Scale	0.066	0.053
Gender		
The Fear of COVID-19 Scale	0.081	
Beck Hopelessness Scale	0.421	
Marital status		
The Fear of COVID-19 Scale	0.472	
Beck Hopelessness Scale	0.877	
Presence of psychiatric illness		
The Fear of COVID-19 Scale	.745	
Beck Hopelessness Scale	.506	
Educational status		
The Fear of COVID-19 Scale	0.010**	
Beck Hopelessness Scale	0.043	
Having children		
The Fear of COVID-19 Scale	0.355	
Beck Hopelessness Scale	0.191	
Number of individuals living in the family		
The Fear of COVID-19 Scale	0.104*	0.047
Beck Hopelessness Scale	0.705*	0.011
Number of days out per week		
The Fear of COVID-19 Scale	0.001*	-0.109
Beck Hopelessness Scale	0.841	-0.006
Income status		
The Fear of COVID-19 Scale	0.001**	
Beck Hopelessness Scale	0.055	
Job income level		
The Fear of COVID-19 Scale	0.058	
Beck Hopelessness Scale	0.033**	

DISCUSSION

In this study, the levels of mental disorders such as fear and hopelessness in individuals during the COVID-19 pandemic were investigated. The present study showed a direct relationship between the fear and hopelessness of the general population. It means that when the fear of COVID-19 increases, the hopelessness about COVID-19 also increases. The participants had mild hopelessness level and medium fear of COVID-19. Age positively affected the fear of COVID-19; when age increases, fear of COVID-19 increases. Education negatively affected the fear of COVID-19 in the studied participants; the higher education, the lower fear of COVID-19. The findings also showed that the number of days the person goes out a week also negatively affected the fear of COVID-19. That is the lower number of days the person goes out a week, related to the higher fear of COVID-19. The income, job, and education also negatively affected the hopelessness of the participants. In other words, the higher the income, job status, and education, the lower the hopelessness about COVID-19.

According to the results obtained from our study; This is in line with some studies showing that people experience feelings of helplessness, increased levels of self-blame, depression, and fear of getting sick or dying (20-22).

Ahorsu et al. found FCV-19S higher overall scores to indicate a more severe fear of COVID-19 and did not find the effect of age and gender on the response pattern of the fear (18), while our study found the relation of age on the fear but found that gender was not associated with the mentality caused by the COVID-19. Our study results are also not in line with the study results by Bitan et al. (23) and Limcaoco et al. (24, 25) who found an association between gender and fear of COVID-19.

Hacimusalar Y et al. (26) found a significant relationship between the income rate and this situation that is the hopelessness of people was affected by the loss of income and that the uncertainty of the pandemic situation affected this situation, and McLaughlin et al. (27) also found that the working parents faced several problems during the pandemic due to vacation of the schools and children staying at home and that the pandemic, leading to loss of income, coincide with the results of our study.

Jeong et al.(28) also found an association between inadequate basic supplies and feelings of uncertainty and frustration during the quarantine period, which are similar to the results of our study.

Harper et al. (29,30) also found a significant relationship between staying at home and fear of the COVID-19, and Galea et al. found the serious effect of physical distancing on the mental health of the population (31), which is consistent with our study results.

The fear of unknown and new infective factors and uncertainty for the future was also affected by the pandemic in the social isolation and staying at home in a study by Khan et al. (32) while our study found that the number of days the person goes out a week negatively affected only the fear of COVID-19.

Our study results also support the study results by Ustun et al. (33) who found that those with fear of infecting others and being infected also had anxiety about the future, sadness, and anxiousness.

Lee et al. (34) showed a significant association between age and education and the mental disorders; that is, those who were more educated and were younger had higher fear about Coronavirus, and extreme hopelessness, are different from our study results.

CONCLUSION

It is concluded that age, education, and the number of days a person goes out a week affected the fear of COVID-19. It means that the older, less educated, and more isolated people experience higher fear of COVID-19. Income, job, and education also affected the hopelessness of the participants. The hopelessness level is reduced by increasing income, job status, and education. The participants had mild hopelessness level and medium fear of COVID-19during the pandemic. When the fear of COVID-19 increased, the hopelessness level also increased. Those who have lower education, job status, and income should be supported more to reduce the psychological distress of pandemic's. Due to the pandemic's rapid spread, the policymakers and authorities should adopt effective behavioral strategies to reduce the mental consequences of this pandemic.

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