The Role of the SARS-CoV-2 Pandemic on Suicide Rates
Preliminary Study in a Sample of the Greek Population

To the Editor:

The latest developments with the outbreak of the novel coronavirus pandemic have overturned the conditions in the everyday human life.[1] Although the authors understand that further study is necessary once the pandemic is over, we attempted to examine the role, if any, the current situation may have on suicides and unnatural deaths in our population.

The novel coronavirus first appeared in Greece on February 26, 2020. On February 27, all events in the country were canceled. On March 10, because of the outbreak of the virus in multiple areas of the country, the operation of all educational structures of all levels was suspended, followed by the lockdown of cafes, bars, museums, shopping malls, sports facilities, and restaurants on March 13. On March 16, the operation of all stores was ceased, as well as the operation of all places of worship of all religions. Since March 23, significant restrictions have been imposed on the transportation of citizens throughout the country. On May 4, the government began to take gradual actions for the de-escalation of the emergency measures with the partial withdrawal of restrictions on traveling and the gradual resumption of operations which, until May 15, has not been completed.[2]

Many authors have speculated that social distancing as well as its secondary implications to the economic, psychosocial, and health-associated settings may induce an increase in the risk of suicide.[3] People with a strong social life were forced to stay indoors and reduce social interactions to a minimum, whereas those who had the opportunity to isolate themselves during the day were forced to live with their family throughout the day.[4] This change in the daily life was hypothesized to have had a direct impact on people's psychology, often in a positive sense with the tightening of family relationships, while other times adversely highlighting or even intensifying the existing relational issues, thus further aggravating the psychological status of those involved.[5,6] Although people's emotional responses to these conditions may vary, some individuals may experience worsening symptoms of emotional disturbances and are deprived of care because of social isolation, have difficulty coping with financial or other difficulties in an unfavorable occupational environment, or already have a history of active suicidal ideation and psychiatric disorders.[7,8]

In 2011 study, an association was found between the influenza B virus disease and increased suicidality.[9] The main suspected factors were the deprivation of the individuals' religious needs, the abstinence from the preferred occupations, the prohibition of access to supportive organizations, the reduced access to medical centers, the shortage of medicinal products in pharmacies, the general feeling of fear and anxiety especially among vulnerable groups and health workers, and

TABLE 1. Frequency (%) of Manner and Causes of Death Between March 1 and May 15 Across 2010–2020

	n (%)											
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***P***
Manner of death												
Unintentional	10 (76.9%)	2 (100%)	7 (70%)	3 (75%)	0 (0%)	6 (66.7%)	6 (75%)	6 (60%)	11 (78.6%)	8 (72.7%)	11 (91.7%)	0.596
Intentional self-harm	3 (23.1%)	0 (0%)	3 (30%)	1 (25%)	2 (66.7%)	3 (33.3%)	2 (25%)	3 (30%)	3 (21.4%)	3 (27.3%)	1 (8.3%)	
Assault	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33.3%)	0 (0%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	
Cause of death												
Unintentional road traffic injury	7 (53.8%)	1 (50%)	3 (30%)	2 (50%)	0 (0%)	1 (11.1%)	1 (12.5%)	1 (10%)	1 (7.1%)	1 (9.1%)	3 (25%)	**0.030**
Unintentional fatal drowning	0 (0%)	0 (0%)	3 (30%)	1 (25%)	0 (0%)	3 (33.3%)	3 (37.5%)	0 (0%)	3 (21.4%)	5 (45.5%)	3 (25%)	
Unintentional poisoning	0 (0%)	1 (50%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (30%)	2 (14.3%)	0 (0%)	4 (33.3%)	
Other unintentional cause (total $n < 3$)	3 (23.1%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	2 (22.2%)	2 (25%)	2 (20%)	5 (35.7%)	2 (18.2%)	1 (8.3%)	
Intentional self-harm by hanging	2 (15.4%)	0 (0%)	1 (10%)	0 (0%)	1 (33.3%)	2 (22.2%)	1 (12.5%)	2 (20%)	3 (21.4%)	1 (9.1%)	1 (8.3%)	
Intentional self-harm by firearm projectile	1 (7.7%)	0 (0%)	2 (20%)	1 (25%)	1 (33.3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Other intentional self-harm cause (total $n < 3$)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (11.1%)	1 (12.5%)	1 (10%)	0 (0%)	2 (18.2%)	0 (0%)	
Assault injury	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33.3%)	0 (0%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	

abstinence from recreational activities (sports, concerts). All the previously mentioned may also depend on the citizens' sense of security about the state mechanism (results of the policy of each state in relation to the effectiveness of dealing with the pandemic), the religious beliefs of the people and the structure of the family composing the cultural settings in each state. Of course, there could also have been the possibility of a reduction in suicide rates, as Emile Durkheim argued in 1960, who considered suicide to be inversely related to the spirit of social integration.[10]

For this reason, we examined deaths from unnatural causes that occurred in the Greek regional unit of Evros, Thrace, from March 1 to May 15, 2020, to see whether the suicide rates increased during the period of isolation as compared with previous years. Eighty-four deaths from unnatural causes had taken place during the same period from 2010 to 2019 in the same geographical region (Table 1).

Between the March 1 and May 15, 2020, a total of 32 sudden or violent deaths occurred in Evros, Greece. These included 20 deaths (62.5%) that were attributed to natural causes, 11 unintentional injury deaths (34.4%; 4 by poisoning, 3 by road traffic injury, 3 by fatal drowning, and 1 by blunt trauma),[11] and 1 suicide by hanging (3.1%; Table 1). There were no meaningful differences in the manner of death across the study periods (Fisher exact test, $P > 0.05$). Furthermore, half (50%) of the suicide incidents within the time frame examined and the comparison group had a known psychiatric history.

The finding that in a Greek population sample, there was no change in the rates for violent deaths, including suicides, is an important one. Although the social settings during the restrictive measures against the novel coronavirus pandemic have formed a drastically altered social condition, during the existing framework, suicidality did not seem to be affected by social factors, but rather to depend more on the individuals' medical history and especially their psychiatric background. Neither the social isolation due to the restrictive measures nor the constant presence of the close family environment seemed to act as deterrent or an auxiliary factor to committing suicide. The same pertained, as well, to all manners of death among unnatural deaths in general. However, we do understand that this is simply preliminary data and that further study will be needed after the complete cessation of this event. To obtain a clearer picture of the suicide trends in relation to the previous years, the study should be reproduced for the postpandemic period as well in relation to the psychosocial and economic changes that may follow.

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The authors report no conflict of interest.

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Media-Based Clinical Research on Selfie-Related Deaths in Turkey

To the Editor:

We read with interest the March 2020 issue of Gioia et al's[1] study entitled "Media-based research on selfie-related deaths in Italy." We read the research article 41: 27–31 and found similar results in our study in our country. We analyzed 25 selfie-related deaths reported in Turkey between 2014 and 2020 including and evaluated the parameters such as the ages, genders, characteristics of the place where the incident occurred, the type of selfie, and the way death occurred.

The number of selfie-related deaths per year is illustrated in graph 1. Of those who died, 17 were male (68%) and 8 were female (32%). The age distribution of the victims is shown in graph 2. According to the selfie type, in 22 cases, it was in the form of selfie (mono selfie), in 3 cases with more than one person (group selfie). In 23 cases, the person died while taking a selfie, and 2 cases died after an accident that occurred while the person next to him took a selfie. Detailed information of all 25 cases is given in Table 1.

Two hundred sixty-two cases of self-related injury and death have been reported in the world between 2011 and 2018. In a study, when countries with the highest number of selfie-related deaths were listed between 2014 and 2016, India ranked first, United States ranked second, and Russia ranked third.[2] These injuries and fatalities were frequently caused by falls on touristic trips.[2,3] In our study, the cases of falling from height on touristic trips are in the first place.

In the study of Gioia et al,[1] 75% of selfie-related death cases were male and 25% were female, mean age was 24 years, and the age range was 13 to 60 years. In our study, the cases were 68% male and 32% female. It was determined that the average age was 21.3 and the age range was 3 to 47 years. In the same study,[1] death with a