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University students' mental health amidst the COVID-19 quarantine in Greece

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Abstract

The COVID-19 hit also Greece but due to early measures and their exceptional success, the death toll is one of the lowest in the world. Here we report the results from the analysis of the responses to an online survey, from the first 1000 university students, concerning the impact of the lockdown on their mental health. Overall, there was a 'horizontal' increase in scores; 42.5% for anxiety, 74.3% for depression, and 63.3% increase in total suicidal thoughts. Quantity of sleep increased in 66.3% but quality worsened in 43.0%. Quality of life worsened in 57.0% (same in 27.9%). There was a 25-3 fold increase in possible clinical cases of depression and an almost 8-fold increase in suicidal thoughts. Almost a third accept and one fifth are open to conspiracy theories concerning COVID-19. To our knowledge this is the first study reporting data concerning the impact of lockdown and quarantine on the mental health of university students. While the acute impact seems clear, the long-term consequences are unknown and although suicidal thoughts have risen substantially, it seems unlikely this will result in deaths. However, the results constitute a clear message that vulnerable populations are at a need for specific interventions concerning their mental health issues.

Key words: COVID-19; mental health; university students; conspiracy theories; suicidality; depression; quarantine; lockdown

The COVID-19 hit also Greece but due to early measures and their exceptional success, the death toll is one of the lowest in the world. Here we report the results from the analysis of the responses concerning the impact on mental health from the first 1000 university students, gathered between 4-9 April 2020, that is during the first days of the lockdown

Data were collected anonymously through an online questionnaire which included the STAI (Fountoulakis et al., 2006), the CES-D (Fountoulakis et al., 2001) the RASS (Fountoulakis et al., 2012) and questions to assess beliefs in conspiracy theories including those pertaining to COVID-19, as well as sexuality, sleep and quality of life. Ethical approval was obtained prior to the initiation of the study and participants gave informed consent.

Participants' age was 22.07 ± 3.30 years; 68.01% were females and 30.99% were males.

Scale scores are shown in table 1. There was a 'horizontal' increase in scores; 42.5% for anxiety, 74.3% for depression, 93.5% for suicidal intention, 67.5% for loss of value in life and 63.3% increase in total suicidal thoughts in a population with an 24% higher than expected suicidal and self-destructive background.

Participants reported a change with increase in anxiety (73.0%), depression (60.9%) and overall suicidality (20.2%); quantity of sleep increased in 66.3% (same in 19.3%) but quality worsened in 43.0% (39.1% same). Sexual life worsened in 38.6% (same in 55.3%). Quality of life worsened in 57.0% (same in 27.9%).

Above the CES-D threshold for clinical depression (Fountoulakis et al., 2001) scored 25.9% and considering the false positive rate to be 9.16-11.44 (Fountoulakis et al., 2001; Fountoulakis et al., 2012), there is a 2.5-3 fold increase in comparison to the expected 5-6% prevalence of clinical depression in the general population. Additionally, there was an almost 8-fold increase in suicidal thoughts with 9.7% currently thinking of committing suicide and doing some specific plans on how to do it (in comparison to 1.23% expected from the general population) (Fountoulakis et al., 2012).

On average 35% reported they follow conspiracy theories while 20% have a neutral but open approach. For covid-19, 29% believe it is a laboratory product (23% neutral), 25% that the spreading was a deliberate covert action (22% neutral) and 24% that it was developed as a bio-weapon (22% neutral)

To our knowledge this is the first study reporting data concerning the impact of lockdown and quarantine on the mental health of university students. One previous study on Chinese medical students reported on the impact of the epidemic in general and the findings were unimpressive (Cao et al., 2020).

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	Mean	Std.Dev.	Expected mean from general population	Expected mean from depressed patients
year of studies	3.78	1.81		
STAI-S	45.44	13.23	24.95±11.36 (Fountoulakis et al., 2006) 38.83±11.96 (Fountoulakis et al., 2012)	44.91±9.18 (Fountoulakis et al., 2006)
CES-D	19.17	7.68	10.78±9.68 (Fountoulakis et al., 2001) 11.89±9.13 (Fountoulakis et al., 2012)	36.90±10.98 (Fountoulakis et al., 2001)
RASS Intention scale	63.45	133.72	32.79±89.73 (Fountoulakis et al., 2012)	
RASS life scale	172.97	74.19	103.29±94.93 (Fountoulakis et al., 2012)	
RASS History scale	44.74	62.22	36.08±48.74 (Fountoulakis et al., 2012)	
RASS Total score	281.16	218.98	172.17±180.26 (Fountoulakis et al., 2012)	

Table 1: Descriptive statistics of the scale scores and comparison with the expected scores from general population studies

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