FACTORS RELATED TO HEALTHCARE PROFESSIONALS' PSYCHOLOGICAL RESILIENCE DURING THE SARS-COV-2 PANDEMIC HEALTH CRISIS: PRELIMINARY STUDY ON A SAMPLE OF THE GREEK POPULATION

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Dear Sir,

The present study aims to investigate psychological resilience (PR) among frontline healthcare professionals in Greece, regarding the disruption of their everyday lives due to restrictive measures and the cancellation of their annual leave for indefinite duration, during the first SARS-CoV-2 pandemic outbreak (March-May 2020). This study focuses on the investigation of the possible risk/protection factors and coping strategies which have been previously adopted during the financial crisis having occurred in Greece since 2012, having in turn led to an "a priori" decimated health system (Kondilis et al. 2012).

The concept of PR pertains to the process of one's successful adaptation, despite the occurrence of threatening conditions (Luthar et al. 2000). The field of psychiatric genetics has biologically substantiated mental resilience, which was formerly only a concept of psychology, as epigenetic processes and plasticity genes have been found to putatively modify the expression of one's genome affecting even behavioral characteristics aiming at survival (Belsky & Beaver 2011, Ziegler et al. 2016). This study was performed in COVID-19 reference hospitals.

In order to evaluate PR among Greek frontline healthcare professionals, an online survey was conducted. The research involved 324 health professionals employed in SARS-CoV-2 reference centers in Northern Greece. Among subjects, 107 (33.02%) were male and 217 female (69.97%). The largest age group of the sample was 41-60 years old (59.8%) with a mean age of 44.55 years (TA=8.604), and the majority were graduates of higher education (91.3%). The highest percentage comprised doctors (n=158, 48.9%), and frontline nursing staff (n=99, 30.7%) while 67 subjects were administrative staff (20.4%). Regarding the time of service in the Greek National Health System, 29.7% reported 1-10 years of working experience, 40.2% reported 11-20 years, and 30.2% longer than 21 years, with an average of 18.87 years (TA=8.280). Furthermore, 177 people (54.6%) had rotating shifts, while 49.7% t were married.

Questions from the Mansfield and Wosnitza Multidimensional Resilience Scale (MTRS) were used to investigate the factors affecting mental resilience (Connor & Davidson 2003). Participants were asked to rate their agreement with a series of statements about their work using a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The first main component analysis was done on the MTRS scale highlighting four factors that explained 51.61% of the total dispersion rate. The results indicated four factors expressing corresponding dimensions of mental resilience. The first dimension, "Motivation" (8 questions, α=0.85), described the factors that help health professionals maintain their motivation. The second dimension, "Social Mental Resilience" (6 questions, α=0.79), referred to their relationships as well as their ability to enter into new relationships within their professional environment. The third dimension, "Emotional Mental Resilience" (5 questions, α=0.82), identified personal health characteristics that help subjects maintain emotional stability when faced with difficult situations. Finally, the fourth dimension, "Adaptability" (2 questions, α=0.82), referred to the ability to be flexible and adapt to new conditions or challenges in the workplace. The factorial structure of the scale revealed in the present study differed from the original scale. The final factor model explains 64.41% of the total variability of the variables.

Regarding factors helping healthcare professionals overcome potential challenges in their occupational environment and empowering them to persevere despite adversity, a set of values and beliefs was reported. In particular, health professionals rated their ability to adapt to different situations and changes very highly as well as the knowledge and acquired experience of the previous years in the management of stressful situations. An important result is the statement of the special characteristics which they believe to distinguish them: not giving up, having a strong sense of purpose, achieving their goals through work and making the best possible effort, while entering into secure and close relationships.

The most important protective factors for PR, according to the participants, were: their values and beliefs, adaptability/ flexibility, experience, and self-esteem/self-efficacy. The values and beliefs of the majority of participants stemmed from intrinsic motivations, and acted protectively in times of crisis. Subsequently, despite the difficulties faced, healthcare workers maintained their devotion to their profession and were motivated more by intrinsic than external motives (Johnson et al. 2014).

The present study indicated that in the midst of a pandemic crisis, healthcare professionals experience high levels of psychological resilience in their workplace. The high levels of resilience and self-efficacy show that Greek health professionals feel confident in their abilities and have developed protective factors and strategies that make it easier for them to meet the challenges. The fact that Greek healthcare workers hold permanent positions without evaluations affecting their occupational status despite the prevailing unemployment in the country, may affect their sense of security and strength (Kondilis et al. 2012). The mediating role of resilience suggests that health professionals with higher self-efficacy are better able to enhance their resilience and, therefore, cope well in the novel coronavirus pandemic crisis.

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