

PSYCHOLOGICAL DISTRESS AMONG HEALTHCARE PROFESSIONALS INVOLVED IN THE COVID-19 EMERGENCY: VULNERABILITY AND RESILIENCE FACTORS

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Abstract

The aim of this paper is to outline some considerations about the psychological distress in healthcare professional during the COVID-19 pandemic. We summarize available literature both on 'protective' and 'predisposing' factors potentially involved in the occurrence of psychological distress, including PTSD, in frontline healthcare operators. Valid social support, self-efficacy, internal locus of control (LOC) and sense of coherence (SOC) have been considered as resilience factors, in previous studies. Likewise, several observations pointed on the relevance of individual and environmental vulnerabilities. No real evidence is available about strategies to face the emotional burden for healthcare operators due to present COVID-19 scenario. However, we strongly believe that the containment of isolation anxiety with an appropriate emotional support should be the first instrument to minimise the psychological effect of pandemic on the more exposed healthcare professionals.

Key words: COVID-19, resilience, vulnerability, PTSD, healthcare professionals

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The World Health Organization (WHO) defined the new 2019 coronavirus (COVID-19) as 'pandemic' on 11th March 2020. Apparently, three months before, no one knew that SARS-CoV-2 even existed. Governments declared healthcare emergencies with delay. Present scenario occurred, with a virus spreading to almost every country, thousands of deaths, a deep impact on economies, and a global challenge for the health-care systems. COVID-19 is pushing to frontline healthcare operators, causing an additional level of stress never faced before, even if paramedic and emergency personnel are accustomed to encounter events that may threaten their own wellbeing during daily work (Iranmanesh, Tirgari, & Bardsiri, 2013), including contacts with traumatized victims ('vicarious traumatization') (Greinacher, Derezza-Greeven, Herzog, & Nikendei 2019). Research already highlighted the higher prevalence of PTSD symptoms in emergency professionals than in general population samples (Carmassi et al., 2018; Carmassi et al., 2016). However, healthcare professionals are now experiencing new and unexpected fears, because of the specific characteristics of pandemic, namely the high transmissibility of the virus, the absence of vaccines and treatments, the sudden risk of transition to severe acute respiratory distress syndromes (ARDS), and the inadequate supply of personal protective equipment (PPE), as occurring in many countries. Moreover, COVID-19 has prompted the reorganization of entire hospitals' activities in about three weeks: elective activities have been interrupted, and intensive cares

freed up to create as many beds as possible. Indeed, there are enough factors raising the risks of developing a psychological distress on healthcare operators and professionals.

Due to the recent onset of pandemic, both epidemiological and clinical data on the occurrence of psychological distress, including PTSD, in COVID-19 healthcare professionals are lacking. However, we could infer both psychological vulnerability and resilience factors in response to COVID-19, from previous observations on healthcare professionals involved in a number of conditions of emergency and stress partially similar to the one of COVID-19, even if the coronavirus pandemic remain unheard-of. For example, several studies showed a high prevalence of PTSD symptoms, anxiety, fear, depression and frustration in emergency professionals involved in the SARS epidemic of 2002-2004 (Wei, Han, Liu, Liu, & Huan, 2004; Wu et al., 2009). The most common symptoms included recurrent and intrusive thoughts about the events experienced during patients care giving, difficulty in falling asleep, in memory and concentration, hyper-vigilance and hyper-arousal, anger outburst, loss of motivation to work, mood dysregulations, avoidance of working activities and places, alcohol/drugs abuse, numbing, isolation and psychological detachment (Pacella, Hruska, & Delahanty, 2013). These clinical manifestations persisted in quarantined healthcare professionals three years after the SARS outbreak (Wu et al., 2008; Reynolds et al., 2008), increasing the risk of a worsening of physical

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health due to the well-known correlation between acute/chronic psychological distress and a number of physical diseases (Conversano, 2019; Shao et al., 2019; Martino, Langher, Cazzato, & Vicario, 2019; Martino et al., 2019b,c; Martino, Caputo, Bellone, Quattropiani, & Vicario, 2020). However, not all subjects exposed to traumatic events tended to develop mood/anxiety signs and symptoms or PTSD (Miniati et al., 2009, 2017). Several observations pointed out on the relevance of individual and environmental/interpersonal vulnerabilities that has been classified into pre-, peri- and post-traumatic factors. Pre-traumatic vulnerability factors for healthcare professionals included female gender, low socio-economic status, traumatic events during the lifespan and pre-morbid psychopathology (Dell'Osso et al., 2011; Carmassi et al., 2016; Kessler et al., 2018). Peri-traumatic factors were more related to the type and severity of event, the number of traumatic events and the level of emotional involvement with victims (Hatfield, Carpenter, & Rapson, 2014). Post-traumatic factors were related both to context-specific vulnerability factors (such as, stressful working shifts, interpersonal distrusts, difficult communications with colleagues) (Cusano & Napoli, 2003), and to the lack of social support/supportive relationships (Brewin, Andrews, & Valentine, 2000; Ozbay Fitterling, Charney, & Southwick, 2008; Eisenberger, 2013). Nurses and medical staff who perceived a valid social/interpersonal support experienced less stress and anxiety, higher self-efficacy and a better sleep quality than professionals with interpersonal deficits (Bihlmaier & Schlarb, 2016). After all, valid social support, self-efficacy, internal locus of control (LOC) and sense of coherence (SOC) have been considered as resilience factors (Roditi, Bodas, Jaffe, Knobler, & Adini 2019; Di Giuseppe et al., 2020). SOC, namely the personal perception of the ability to manage stress using internal and external resources in order to resolve tensions and find solutions (Antonovsky, 1979, 1987), has been correlated with a good mental condition in a recent study on intensive care unit nurses (Schäfer, Becker, King, Horsch, & Michael, 2019). New variables that mediate the relationship between stress and mental health included 'mindful attention' and 'emotional intelligence': having successful emotional regulation strategies and being mindful of one's internal experience seemed to protect against stress negative responses and to promote subjective well-being. Conversely, 'moral distress' seemed to be negatively correlated with resilience (Schutte & Malouff, 2011; Wang & Kong, 2014).

Obviously, we can only speculate that all these 'protective' and 'predisposing' factors might play a role also in the COVID-19 pandemic. Thus, the sudden outbreak of COVID-19, the number of victims, the involvement of all aspects of everyday activities due to the widespread of a new virus potentially fatal and with no therapeutic options, the stigma of being 'contagious' because 'in touch with the virus', together with a lack of social support in the mid/long term phase, are all new relevant stressors.

COVID-19, and its outbreak in public health, is a traumatic experience for healthcare professionals, more than for the general population. It is reasonable to hypothesize that the emergency departments' staffs will experience more severe PTSD symptoms than those in other services. To reduce the anxiety of isolation, providing emotional support and offering prompt and authoritative operating procedures at the beginning of the outbreak of any threat to public health should be valid instruments to minimise the psychological effect on the more exposed healthcare professionals. To find

out whether different working conditions in the public hospitals might led to psychological effects on healthcare workers, we should investigate the psychological effect of COVID-19 not only on emergency department staff, but also in the high-risk ward (such as, infectious disease specialists and pulmonologists) and on staff in medium-risk wards.

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