



Correlates of Resilience among Frontline health care professionals exposed to Covid-19: A Systematic Review

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Abstract

The present study aims to explore the correlates contributing to resilience among frontline health professionals and strategies that foster resilience among health professionals during COVID-19 through a literature survey. For that purpose PUBMED, SCIENCE DIRECT, SCOPUS, and MENDELEY are the database that was searched using keywords like resilience, COVID-19, Front line healthcare workers to identify studies on the correlates of the resilience of healthcare professionals exposed to COVID-19. Results were organized by outcome measures for comparison. The present review identified the correlates of resilience and how those correlates are associated with resilience in frontline health workers. Of the studies reviewed, antecedents, moderators, and outcome factors were found to be significantly associated with resilience. Each correlates comprises sub-correlates. By gaining in-depth knowledge of the correlates of the resilience of HCWs and understanding the impact of resilience intervention, occupational health psychologists can implement effective & innovative intervention programs for HCWs so that they can enhance their resilience & maintain optimal mental health. This literature review has systematically analyzed correlates of resilience among health care workers exposed to COVID-19 and strategies for fostering resilience among them, as it is also important to maintain their resiliency. This knowledge about correlates of resilience will help us understand how we can design intervention programs for HCWs to enhance resilience in the future.

Keywords: Frontline health workers, resilience, Covid-19

1. Introduction

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the World Health Organization (WHO) on December 31, 2019.

On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. The illness caused by SARS-CoV-2 was termed COVID-19 by the WHO; the acronym is derived from "Coronavirus disease 2019." The name was chosen to avoid stigmatizing the virus's origins in terms of populations, geography, or animal associations.

Front-line workers are employees who provide an essential or key public service. Frontline health workers are the backbone of effective health systems, they were working on the frontlines of the Coronavirus outbreak. In the face of such a large-scale public health emergency, HCWs are put under excessive physical and psychological strain for a variety of reasons, including: nurses are placed in risky conditions where they are fighting a lethal virus with inadequate equipment and non-evidence-based treatment (no specific life-saving treatment), and fear of being infected, worrying about infecting their families and contaminating their homes, which leads to continued use of infected vehicles. Moreover, every day there is significant existential stress associated with witnessing others die and the loss of many patients, colleagues, or loved ones. Prolonged exposure to these stressors may have long-term psychological consequences for healthcare workers, as well as a negative impact on their job performance.

Resilience has been defined in numerous ways, including the following: "the ability to bounce back from adversity, frustration, and misfortune" (Ledesma, 2014). "The learnable ability to recover from adversity, conflict, failure, or even positive events, progress, and increased responsibility" (Luthans, 2002). While resilience may include many stable traits and capacities within an individual, most view the expression of resilience as a dynamic process with a trajectory that can change throughout a person's life, thus, resilience is an evolving interaction among our character traits, biological propensities, and the environment that allows us to positively adapt and bounce back from adversity. Resilience is not a fixed trait, but rather a bio psychosocial and

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spiritual phenomenon, through flexibility, adaptability, and perseverance can help people tap into their resilience by changing certain thoughts and behavior. Resilience can also be a mechanism for accelerating recovery from adversity-related mental health problems such as post-traumatic stress disorder.

The COVID-19 pandemic has resulted in a significant decline in mental health across the globe and it is clear that this has become a co-occurring public health crisis. The combined impact of COVID-19 on major life domains such as social life, occupational status, and financial security has proven to be a significant source of adversity.

Objective of the study

Considering the challenges faced by frontline health workers and the effects on their physical and psychological wellbeing, it is important to study their resiliency, which keeps them going and fighting against all odds to sustain their jobs. Various studies have been conducted throughout the world during the pandemic phase. These studies are focused on the impact of COVID-19 on the mental health of HCW. But there is a lack of a systematic review examining the correlates of resilience among frontline health workers exposed to COVID-19, especially in India. Empirical research on the resilience of frontline HCW published in the twenty-first century needs to be mapped and its findings synthesized. Therefore, the present study aims to explore the correlates contributing to resilience among frontline health professionals and strategies that foster resilience among health professionals during COVID-19 through a literature survey.

2. Methods

Study Materials: In the present study, different kinds of literature were searched, followed by a grouping of the articles of interest. The search strategy for this literature review was to identify studies that include resilience and its correlates. From 2019 to 2021, publications included both national and international databases in English (2019–2021). In the present study, a total of 121 types of literature were searched for correlations with the resilience of healthcare professionals exposed to COVID-19. This study finally obtained 42 research articles, published mainly in 2019–2021.

Inclusion and exclusion criteria

Inclusion criteria were included in this study:

a) Articles had to be published in peer-reviewed national and international journals.

b) The articles were written in English.

c) Articles had to be published in the time period of 2019–2021.

Exclusion criteria were included in this study:

a) Other studies that focus on stress reduction or other mental health issues alone and are not related to resilience were excluded from this study,

b) Studies that focus on the resilience of the general population during Covid19 pandemic were also excluded as this literature review is only focusing on health care professionals those exposed to Covid-19.

The articles were grouped into four categories, where some of the articles represent more than one group. The groups were: demographic factors, positive correlates of resilience, negative correlates of resilience, and impact of resilience training on health care workers.

Procedure

All the literatures have been systematically searched in PUBMED, SCIENCE DIRECT, SCOPUS, and MENDELEY. The following keywords were used to select the studies on the relationship between resilience and burnout, depression, stress, anxiety, physical illness, and other psychological distress in healthcare workers of COVID-19: (resiliency or resilience) and (burnout or “occupational burnout” or “depression” or “stress” or “anxiety”); and (frontline health care workers of COVID-19). Relevant papers in the key journal were also found, such as “The Indian Journal of Critical Care Medicine,” “Psychology, Health & Medicine,” “Frontiers in Psychiatry,” and “International Journal of Nursing.” The search for papers was considered complete when various databases were unable to provide new papers on this particular topic.

Analysis: A systematic review was done with the selected studies. A systematic review is defined as “a review of the evidence on a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant primary research, and to extract and analyze data from the studies that are included in the review.”

3. Result & Discussion

A total of 121 articles were screened for this literature survey, 42 studies were selected for this survey according to the inclusion criteria. The studies were conducted from different continents, including Asia (n= 21), Europe (n= 13), USA (n=9), Africa (n=1). Among Asia most of the studies were

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from China (n=11), then India (n=4), other than studies were also from Bangladesh (n=1), Iran (n=2), Japan (n=1), Arabia (n=1), Middle East (n=1), Indonesia (n=1). Among Europe the studies were from Turkey (n=4), Italy (n= 2), Portugal (n=1), Spain (n=1), Netherlands (n=1), Greece (n=2), UK (n=1). Among USA studies were from New York (n=1), There was one study from Australia (n=1) as well.

Human life cannot be separated from problems; resilience is seen as the survival ability of individuals to predict and rise from the problems at hand. Individuals' resilience is influenced by many factors. Some experts suggest some factors affecting resilience, such as Tedeschi and Kilmer (2005); Bonanno et al. (2007; Hegney et al. (2007; Boardman et al. (2008). They reported that resilience is strongly influenced by several things, namely: good interpersonal relationships, social relationships, confidence to continue to expand relationships with other individuals, having internal resources such as optimism and positive thinking, and high spirituality, which includes religiosity, These factors are further explained by Barbara, Lisa and Karen (2011). However, considering the present study, the resilience of frontline health workers is correlated with various factors, including demographic factors, such as age, gender, work experience, and level of education, psychological factors such as coping style, defense mechanisms, positive affect anxiety, depression, burnout, somatization, distress, fear of infection, etc., psychosocial factors such as social support, interpersonal relationships, organizational support, leadership support, etc., spiritual factors like religious faith, hope, and gratitude. The conditions faced by healthcare workers during the current COVID-19 pandemic can be likened to battlefield conditions faced by military personnel (Heath, et al, 2020) . A describe a rapidly deployable psychological resilience intervention based on the Battle Buddy system of the US army combined with elements of the anticipate plan-deter model. The intervention had three levels of support: a Battle Buddy system to provide peer support; unit-level support through appointing a mental health consultant; and individual support for at-risk individuals. Whereas the latter two elements are more resource-intensive, the Battle Buddy concept is easily implemented and requires few resource commitments. A literature review conducted by (Vinkers, et al, 2020) at Netherlands noted in their study the importance of resilience at the individual and societal level, as well as the implication for patients with a psychiatric condition and healthcare workers. They have concluded that it will be important to obtain data on the psychosocial impact in acute and recovered COVID-19 patients and their relatives on how to best mitigate the negative effects. Such studies will

allow the identification of factors associated with resilience, according to living context, coping strategies, personal history,, and, if possible, biological features such as the epigenetic background. This will provide a platform from which to develop community-based and personalized interventions to improve resilience and reduce the risk of psychopathology in the current crisis and similar challenges in the future. For addressing the occupational stress in healthcare workers, a cognitive behavioral therapy (CBT)-based intervention is suggested, also supported by a Cochrane review, which can build/improve/enhance resilience, which is needed to shield individuals against the development of psychopathology, at the public health level in humanitarian crises. In addition to developing resilience, this will help combat anxiety, depression, somatization, and incapacitation (Irfan, et al, 2020). An integrative review conducted (Baskin & Bartlett, 2021) which was interested in examining resilience among healthcare workers during the coronavirus disease (COVID-19) pandemic They have also reported that resilience scores among frontline healthcare workers worldwide during the COVID-19 pandemic were overall found to be in the moderate range. Data from the United States showed a decrease in nurse resilience, whereas participants from China had increased resilience compared with pre-pandemic levels. Building resilience in nurses and other healthcare workers can serve as a protective factor against negative outcomes related to the job, including burnout, anxiety, and depression, and can improve patient outcomes. A literature review was conducted to explore the concept of personal resilience as a strategy for responding to workplace adversity and to identify strategies to enhance personal resilience in nurses. Their findings suggest that nurses can actively participate in the development and strengthening of their own personal resilience to reduce their vulnerability to workplace adversity and thus improve the overall healthcare setting. They recommend that resilience-building be incorporated into nursing education and that professional support should be encouraged through mentorship programs outside nurses' immediate working environments (Jackson, 2007). This literature review has systematically analyzed correlates of resilience among healthcare workers exposed to COVID-19 and strategies for fostering resilience among them. As the pandemic situation is going to continue for a while, it is also important to maintain their resilience further. This knowledge about the correlates of resilience will help us understand how we can design intervention programs to enhance resilience in the future.

4. Conclusion

The present review identified the correlates of resilience and how those correlates are associated with resilience in frontline health workers. Of the studies reviewed, antecedents, moderators, and outcome factors were found to be significantly associated with resilience. Each correlate comprises sub-correlates. Occupational health psychologists need to rely on evidence-based intervention programs to enhance the resilience of HCWs. Therefore, in conclusion, it can be said that by gaining in-depth knowledge of the correlates of the resilience of HCWs and understanding the impact of resilience intervention, occupational health psychologists can implement effective & innovative intervention programs for HCWs so that they can enhance their resilience & maintain optimal mental health.

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