

The Prevalence of Post-Traumatic Stress Disorder on Healthcare Workers During the Covid-19 Pandemic: Literature Review

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Abstract

Preventing symptoms of post-traumatic stress disorder (PTSD) that health workers face during the current COVID-19 pandemic is a worldwide challenge, as healthcare workers may experience chronic, often unpredictable work stressors that lead to PTSD. This review aimed to describe the prevalence of post-traumatic stress disorder worldwide. As part of this review, we searched MEDLINE, PubMed, Google Scholar, and Crossref for publications using selected keywords. The Articles have been reviewed and classified into one or more categories based on Topics: prevalence of post-traumatic stress disorder (PTSD). A total of 13 publications fit our inclusion criteria. Here The findings of the review show the prevalence is high in Spain, Italy, and the USA; the mean shown in the review is 13,3% of PTSD. Highlight the need for urgent interventions to protect healthcare workers from the psychological impact of pandemic-related traumatic events leading to PTSD. Health care Policies must consider strategies for preventing and managing PTSD and related mental disorders.

Keywords: psychology; education

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INTRODUCTION

The coronavirus disease 2019 (covid-19) dramatically hit the world and has a major impact on healthcare workers (HCWs)(Saladino et al., 2022). There is a large amount of research showing the impact of Covid 19 on economic, health, and psychological aspects. Healthcare workers (HCWs) as frontline workers face difficulty learning how to communicate relevant COVID-19 information without creating a panic. Due to their excessive workload and elevated stress levels brought on by the emergency, healthcare professionals (HPs) appear to be the most impacted. In addition, the healthcare system was unprepared for this crisis, forcing HPs to make do with incomplete information and subpar medical supplies. Due to this circumstance, the number of accessible human

resources has decreased dramatically (Song et al., 2020) (Carmassi et al., 2021).

COVID-19 effect showed negative psychological outcomes on human well-being caused by the separation from loved ones, loss of freedom, uncertainty about the state of the disease, and uneasiness. This suffering could lead to dramatic events, such as suicide, mental illness, addiction, and self-harm (Bassi et al., 2021). Health professionals (HPs) have risk factors that include stressful professional experiences, increased workload, reduced quality of performance, and social isolation (Bai et al., 2004).

The requirement for healthcare professionals (HPs) to avoid their relatives and friends raises the possibility of developing post-traumatic stress disorder. This intense emotional strain may cause anxiety and sadness, which might eventually result in burnout syndrome and even suicidal thoughts. Instead, PTSD is a psychiatric condition managed brought a terrifying experience that the person experiences as trauma and that either directly or indirectly affects them (for example, a serious accident or injury, a threat to their physical safety, a death, or even a serious threat of death, a sexual assault, a natural disaster, a war, etc.) (Arnetz et al., 2020).

METHOD

Search Strategy

A systematic review of the literature on PTSD in HCWs working in hospitals use the PRISMA model. Different sources served as the foundation for the basic procedures and selection criteria. To find more relevant research meeting the requirements. were first employed. Then, the reference sections of the found papers were searched. To find publications for this literature study, certain keywords were employed "Post-traumatic stress disorder", "PTSD", "COVID-19", "Sars-CoV-2", "healthcare worker", "hospital", and "prevalence" were important phrases. To perform the literature search, the keywords were deliberately mixed. One example of a combo was "PTSD" AND "healthcare worker" AND "hospital." To find original articles.

Databases

The article for this study was collected from PubMed, Google Scholar, and Crossref website. This database was chosen for the open access article database that offers exciting and user-friendly features for conducting literature reviews

Keyword Search

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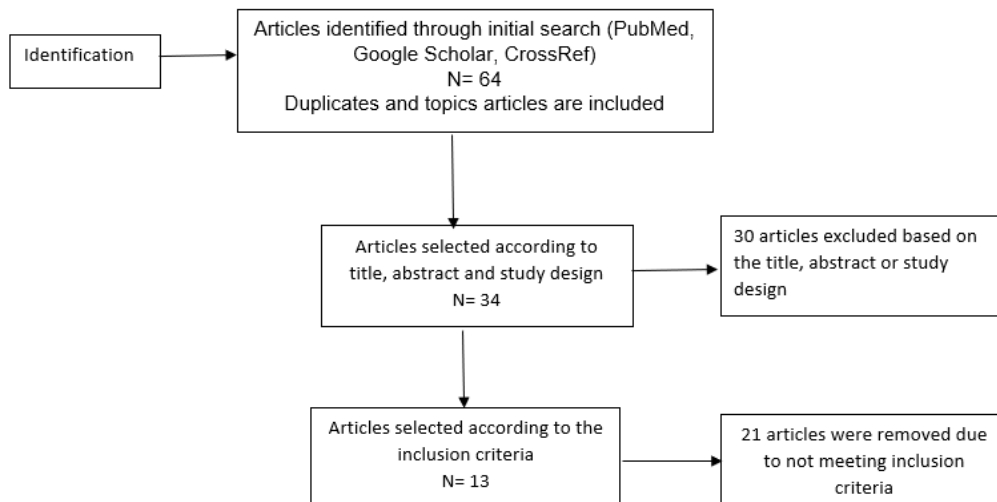
Inclusion Criteria

There were two stages to the article screening process. Articles were first selected depending on their title and abstract. All of the selected titles' abstracts were sorted for more detailed information. The reviewer evaluated the abstracts and classified them as relevant, not relevant, or probably relevant. The eligibility of the full-text articles was determined in the second step. the reviewer separately applied the inclusion and exclusion criteria to potentially eligible studies, and both independently extracted the data from the original articles. the reviewer independently investigated any discrepancies

before a decision was made (GA Wells, B Shea, D O'Connell, J Peterson, V Welch, M Losos, 2021).

Inclusion criteria used in this literature review are; (1). Electronic search on website Medline, PubMed, Google Scholar and Crossref using keyword, (2) All article selected are in English, (3). select articles using title, abstract and study design, and (4). Scope prevalence of PTSD on health workers.

Figure 1. Flowchart describing the search strategy.



RESULT AND DISCUSSION

The study selection process was structured in two stages, as shown in the diagram (Figure 1). We excluded 51 articles out of 64 identified (Table 1) First, we identify articles according to inclusion and exclusion criteria. In the second step, titles and abstracts were reviewed and off-topic articles or duplicate records were removed.

Document Distribution by source and Publication Year

Search result for this literature was source from three database PubMed (5), CrossRef (10) and Google Scholar (3). From this data, it can be inferred that one article has the same metadata in several database sources. Publication year used in this literature is from 2020 (9), 2021 (3) and 2022 (1) articles.

Document Distribution by Location and Design Study

This review was generated in three continent Asia, Europe and America. Asia there are five article concentrate on China (3), South East Asia (1) and Singapore (1), Europe also five article distributed on Italy (2), Spain (2) and France (1), the last American Continent three articles distributed on USA (2) and Mexico (1). All the article selected must have *Cross Sectional Study Design*.

Document Distribution by Prevalence

Table 1. Article synthetic result

No.	Reference	Location	Study Design	Sample	Result
1.	Lu et al, 2021(Lu et al., 2021)	China	Cross-sectional	500	PTSD 15,4 %, Insomnia 44,6%, Depression 25.6%, Anxiety 30.6 % and Stress 23.4 %. Women 91,6 %, 89% on nurse, non-medical 3.2 %
2.	Arnetz et al, 2020(Arnetz et al., 2020)	America	Cross-sectional	695	PTSD 29.1 %, depression 59.5% (9.7% severe), Anxiety 54.9 % (8.3 % severe) survey on nurse
3.	Chew et al, 2020(Chew et al., 2020)	South East Asia	Cross-sectional	1.146	Depression up to 14.3 %, Anxiety 6.7 %, Stress up to 6.8%, PTSD up to 15 %
4.	Tan et al, 2020(Tan et al., 2020)	Singapore	Cross-sectional	470	PTSD 7.7 %, depression 8.9%, Anxiety 14.5 %, Stress 6.6 %. Prevalence of PTSD was higher in non-medical HCWs
5.	Song et al,2020(Song et al., 2020)	China	Cross-sectional	13.897	PTSD 9.1 %, depression 25.2 %, symptoms were more developed in middle- aged, males and lower levels of social support
6.	Rossi et al,2020(Rossi et al., 2020)	Italy	Cross-sectional	1.379	Posttraumatic stress syndrome (PTSS) 49.38%, depression 24.73% associated with female and younger age, frontline HCWs
7.	Gonzalez-Sanguino et al,2020 (González-Sanguino et al., 2020)	Spain	Cross-sectional	3.480	PTSD 15.8%, Anxiety 21.6%, depression 18.7%. associated with females, previously diagnosed with mental health
8.	Ramirez et al,2022 (Patricia González Ramírez et al., 2020)	Mexico	Cross sectional	3.932	Post-traumatic stress 27.7 %, psychological distress 22 %

9.	Wang et al, 2020 (Wang et al., 2020)	China	Cross-sectional	202	16,83 % PTSD
10.	Caillet et al, 2020(Caillet et al., 2020)	French	Cross-sectional	208	27 % PTSD
11.	Luceno-Moreno et al, 2020(Luceño-Moreno et al., n.d.)	Spain	Cross-sectional	1.422	56.6 % PTSD, 58.6% anxiety, 46% depressive disorder
12.	Jonathan Bryant et al, 2021 (Bryant-Genevier et al., 2021)	America	Cross-sectional	26.174	32 % reported depressive syndrome, anxiety 30.3 %, 36.8% PTSD, and suicidal ideation 8.4 % on Healthcare Workers
13.	Marta Bassi et al, 2021(Bassi et al., 2021)	Italy	Cross-sectional	653	39.8 % PTSD

Discussion

During the COVID-19 pandemic, healthcare systems faced significant challenges in organizing human and technical resources. Studies conducted during this period provided an overview of the psychological impact of COVID-19 on HP, during the crisis and long term(Adhanom Ghebreyesus, 2020). Our study highlighted the high prevalence of PTSD, especially among health professionals working in his COVID-19 ward(Lai et al., 2020). They are responsible, susceptible to infection, and live in constant fear of infection. Systematic exposure to emotional stress, anxiety, and isolation are risk factors for mental health problems that may worsen in the future. These considerations are common in each country.

Regardless of the situation, stress appears to be the most commonly observed psychological outcome in HP. Data from a study of medical professionals conducted in China. The following psychological problems: distress, somatization, obsessive-compulsive symptoms, phobic anxiety, depression, insomnia, fear of infecting family members, inability to cope with panic in patients infected with the virus, and from the health care system(Smith et al., 2020). The same considerations apply to Italy, the US, and Spain(Bassi et al., 2021)(González-Sanguino et al., 2020)(Luceño-Moreno et al., n.d.), Additionally, these studies also found that HPs had lower coping skills, resulting in a lower quality of life and being more likely to develop chronic conditions such as PTSD (Kang et al., 2020). Managing stress and psychosocial well-being during this time.

The covid-19 period is just as important as keeping your body healthy and using effective coping strategies. Taking breaks during and between shifts, eating healthy, exercising as much as possible, and connecting with family and friends. Ineffective coping strategies such as substance use and self-isolation must be ruled out. Increased stress can wreak havoc on your mental and physical health. A scenario involving many operators is arguably unique, especially for HP, which has never been involved in an emergency of this magnitude. Using strategies that are effective in managing stress may help. The World Health Organization(Organization & World Health Organization,

2016):(Who, 1944) recommended the following guidelines to protect HP from chronic stress in emergencies:

- 1) Ensure quality of communication and update accurate information.
- 2) Evaluate the working hours and break times required by your staff.
- 3) Raise concerns and give space to ask questions to practitioners.
- 4) Promote mutual support among colleagues.
- 5) Facilitate access to mental health services and psychological first aid inside and outside work.

Another aspect to consider is the development of empathic communication in the relationship between healthcare professionals and patients. The recent COVID-19 pandemic has also changed this relationship(Luceño-Moreno et al., n.d.). Emotional and physical exhaustion caused HP to degrade psychological intimacy and empathic communication with patients as defense mechanisms. They focus on fighting the virus, dedicating their resources to work, and focusing less on relationships(Guay et al., 2019). The conflict between being mentally available and having a functioning machine causes a process of 'depersonalization' in HP and patients who are unable to communicate their feelings to each other. This situation reduces empathetic communication within the medical facility. The relationship between her HP and patients during the COVID-19 pandemic needs further investigation to improve psychological well-being.

Reduce pressure on health workers

The findings of this review highlight the need for urgent interventions to protect healthcare workers from the psychological impact of pandemic-related traumatic events that lead to PTSD. Some evidence has been found for predictors of increased risk of PTSD: young age, female gender, lack of education, heavy workload, poor medical training, not living with a partner, and weak social support. Therefore, health organizations should focus on the support resources available to healthcare workers to prevent serious psychological disturbances related to PTSD in healthcare workers facing an outbreak. outbreak of COVID-19. PTSD is associated with severe chronic anxiety with traumatic event recall, flashbacks, nightmares, increased arousal and decreased social life which can lead to PTSD. Because people with PTSD have a very high risk of suicide attempts, suicide attempts, and death by suicide (2-5 times), prevention of PTSD is widely accepted by industry workers. health care providers are of particular concern, as they already work in higher-risk occupations(Dutheil et al., 2019), and people with PTSD tend not to seek care due to barriers such as lack of information, fear of being, or belief that symptoms may subside over time(Fuhr et al., 2019). Special efforts are needed to prevent healthcare workers currently facing COVID-19 patients from developing PTSD as a sequela of the SARS-Cov-2 pandemic. Therefore, health care policy should consider prevention and management strategies for PTSD and associated psychological outcomes as early as possible, including guidelines for conducting routine screening of PTSD in healthcare workers. There is also an urgent need for interventions to identify and treat health workers with PTSD. Such an approach may reduce the risk of chronic psychiatric disorders.

Limitations of the study

There are some limitations in this review. First, due to the use of the inclusion criterion, we may have missed potentially relevant articles during the first data selection phase.

Second, the cross-sectional profile of all selected studies limits the ability to draw strong conclusions; therefore, care should be taken in generalizing the results. Furthermore, the results may be influenced by organizational factors within the local professional context of each study and, therefore, may not be true for all healthcare professionals: namely, (a) different geographical contexts, (b) cultural variables, and (c) the periods of the COVID-19 pandemic in which the aforementioned studies were conducted may have influenced the types of Different psychological responses to the same stressor among healthcare professionals. Interestingly, all of the selected pieces were produced mainly in Southeast Asia and China, and Western Europe, and only two in the United States and Mexico. This evidence can constitute a bias and somewhat orient the audience reading to specific cultural contexts. Finally, the wide range of morbidity observed was due to (1) the different healthcare settings studied and the (2) time points of the survey. As a result, data from different studies are not always directly comparable and can be misleading in some cases.

CONCLUSION

The SARS-CoV2 pandemic presents a challenge on many levels: for humans and health care workers, to discover new sources of vaccines and therapies, to understand etiology and pathogenesis. However, it also poses a huge challenge for healthcare workers forced to battle a disease that endangers their health as well as that of their patients. This systematic literature review found that youth, low work experience, female gender, heavy workload, working in hazardous environments, lack of training, and social support were factors. PTSD forecast. In addition, the need for urgent interventions to protect healthcare workers from the psychological impact of pandemic-related traumatic events leading to PTSD has become an increasingly important issue in managing the COVID-19 pandemic. Finally, there is an urgent need to identify new health policies for strategies to prevent and manage PTSD and related psychological sequelae in caregivers.

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