

# Psychotherapy for Healthcare Provider During COVID-19 Pandemic: An Evidence Based Clinical Review

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## ABSTRAK

**Latar belakang:** tenaga kesehatan merupakan salah satu kelompok yang terdampak secara psikis maupun somatik dari pandemi COVID-19. Banyak dari tenaga kesehatan yang dilaporkan mengalami kecemasan, depresi, hingga insomnia. Studi ini bertujuan untuk mengidentifikasi psikoterapi sebagai intervensi kesehatan psikologis untuk tenaga kesehatan selama pandemi COVID 19. **Metode:** kajian klinis berbasis bukti terkait psikoterapi sebagai suatu intervensi kesehatan psikologis yang dilaporkan dalam literatur, dan dikembangkan untuk petugas kesehatan selama pandemi COVID-19. Kajian ini dilakukan mengikuti protokol kajian klinis berbasis bukti dengan mencari literatur digital menggunakan sumber data dari Pubmed, Proquest, Cochrane, dan Google Scholar. **Hasil:** terdapat 6 artikel untuk dilibatkan dalam tinjauan sistematis ini. Semua subjek yang masuk dalam penelitian ini adalah tenaga kesehatan. Keenam studi yang didapatkan merupakan studi observasional dan melakukan penilaian menggunakan kuesioner secara potong lintang. Strategi psikoterapi setiap penelitian berbeda-beda yaitu baik dengan psikoedukasi, dukungan social, hingga terapi musik. Secara keseluruhan menunjukkan bahwa psikoterapi dapat mengurangi kecemasan, depresi, dan insomnia. **Kesimpulan:** kondisi psikologis tenaga kesehatan perlu mendapatkan perhatian selama pandemic Covid-19. Meskipun belum ada standar terapinya, psikoterapi dapat menjadi pilihan karena terbukti mampu untuk mengurangi kecemasan, depresi, dan insomnia.

**Kata kunci:** psikoterapi, petugas kesehatan, COVID-19.

## ABSTRACT

**Background:** health workers are one of the groups affected physically as well as psychologically from the pandemic. Recent studies showed many of the health workers reported experiencing anxiety, depression, and insomnia. This study aims to identify psychotherapy as a psychological health intervention, for healthcare workers during the COVID-19 pandemic. **Methods:** an evidence based clinical review of psychotherapy as a psychological health intervention, reported in the literature, which is developed for healthcare workers during

the COVID-19 pandemic. The review was conducted following set out for Evidence-based clinical review by searching the following digital libraries: PubMed, ProQuest, Cochrane, and Google Scholar. **Results:** six publications were selected. The identified psychotherapy used as a mental or psychological intervention for healthcare workers during COVID-19 consists of supportive psychotherapy, psychoeducation, social support, and music therapy. Overall, it shows that psychotherapy, especially supportive psychotherapy, can reduce anxiety, depression, and insomnia. **Conclusion:** the physiological condition of health workers needs to get attention during the COVID-19 pandemic. Although there is no standard of therapy yet, psychotherapy could be an option as it is proven to be able to reduce anxiety, depression, and insomnia.

**Keywords:** psychotherapy, healthcare worker, COVID-19.

## INTRODUCTION

After World Health Organization (WHO) declared COVID-19 as pandemic in March 2020, total cases reached 50 million cases in November 2020 with total daily new cases approximately 500 thousand cases. Indonesia ranks 21<sup>st</sup> in the world with total death of 14 thousand people.<sup>1</sup> COVID-19 pandemic is not only affecting physical but also psychological health and well-being.<sup>2</sup> In general population, this pandemic can lead to the development of new psychiatric symptoms or worsening the pre-existing illnesses.<sup>3</sup> Health care workers (HCW) are also prone to be physically and psychological affected. Many of HCW are reported to have high-rate symptoms of depression, anxiety, insomnia, and distress.<sup>4</sup> The prevalence rates of anxiety and depression among HCWs during COVID-19 are 23.2% and 22.8%, respectively.<sup>5</sup>

Long working hours, lack of personal protective equipment, and concern for their patients and their own families are only several precipitating factors contributing to psychological stress of HCW.<sup>6,7</sup> These psychological health problems not only affect HCWs' attention, understanding, and decision-making ability but could also affect their wellbeing.<sup>8</sup> Hence, protecting HCWs' psychological health is important to control the pandemic and their physical health. China's government has implemented several strategies to address these psychological problems by forming a psychological support team, establishing a shift system, and developing online platform to give education about transmission prevention among patients in hospital.<sup>8</sup>

HCWs need reassurance of their safety

by receiving adequate personal protective equipment, support from colleagues and families, as well as appreciation from patients.<sup>7,8</sup> HCWs also need practice to control their emotions and reduce burn out. Psychological intervention for COVID-19 should be dynamic and flexible enough to adapt quickly to the different phases of the pandemic.<sup>9</sup> Therefore, this Evidence-based clinical review aims to identify strategies used of psychotherapy as psychological intervention to manage HCWs' psychological health during the COVID-19 pandemic.

## METHODS

This article follows the quality reporting guidelines evidence-based clinical review to ensure clarity and transparency of review reporting.<sup>10</sup>

The search process started on October 11, 2020, by consulting the following sources: PubMed, ProQuest, Cochrane, and Google Scholar. The following search strings were applied to the titles, abstracts, and keywords of the articles for the automatic search of publications in the mentioned digital sources: - "psychotherapy" AND "healthcare workers" AND "COVID-19"- "psychotherapy" AND ("doctors" OR "nurses") AND "COVID-19". The inclusion criteria included clinical/intervention studies, observational and cross-sectional studies. All subjects were healthcare workers during COVID-19 pandemic. Full-text articles are in English or Indonesian translation with no limitation of publication time. A total of 6 studies were identified after application of inclusion criteria and eligibility criteria as presented in **Figure 1**.

## RESULTS

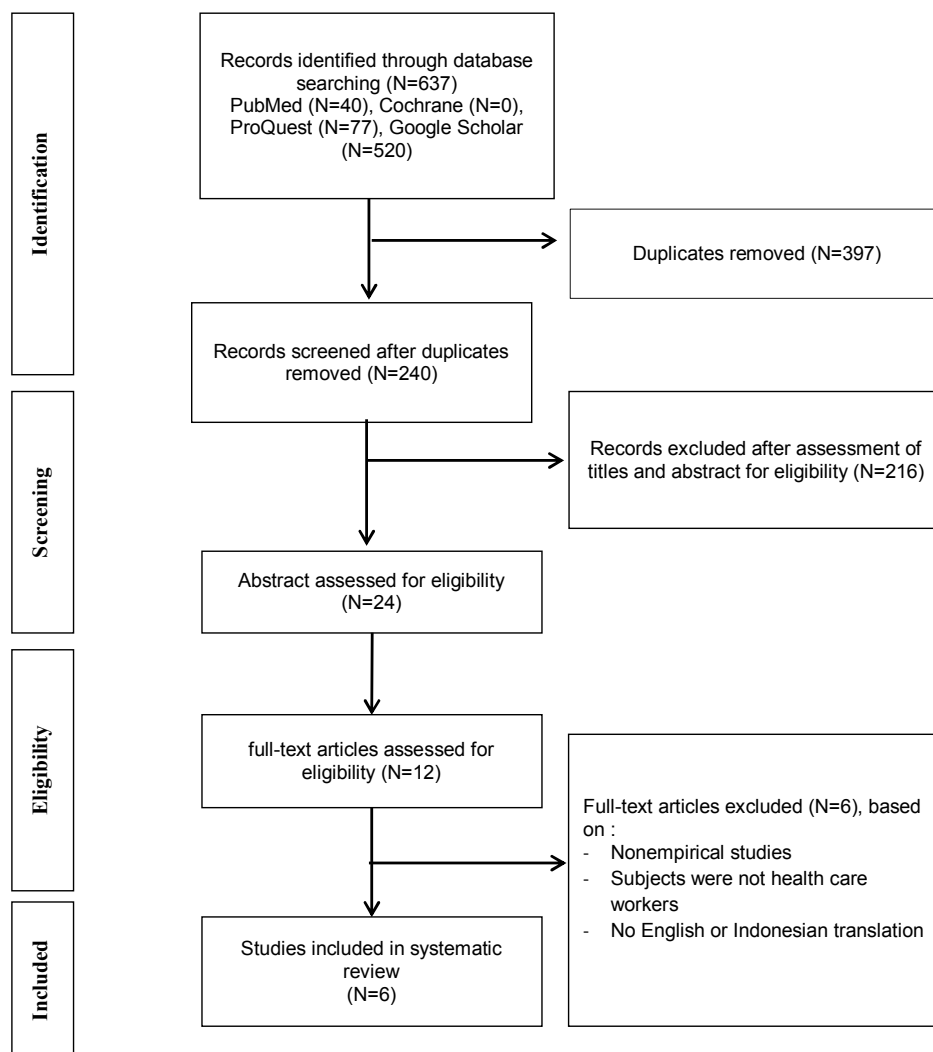
Of the total studies identified, we obtained 637 articles, with details of 40 articles from the PubMed database, 0 articles from Cochrane, 77 articles from ProQuest, and 520 articles from Google Scholar. From the screening for articles duplications, we got a total of 240 articles, and after assessment based on inclusion and exclusion criteria, we got 26 articles.

Of these 26 articles, there are 12 articles of which we can get the availability of the full-text manuscript. Out of these 12 articles, a total of 6 studies were included in the evidence-based clinical review after the application of inclusion criteria and eligibility criteria. As presented, we have selected 6 articles to engage in this evidence-based clinical review. The flow chart of the literature searches and selection of studies

is presented in **Figure 1**.

## DISCUSSION

Some studies reported healthcare workers have experienced varying degrees of stress, anxiety, depression, and insomnia. Compared to non-medics, the effects of anxiety and depression during pandemics did not differ significantly. The difference is in the psychological stressors experienced.<sup>15,16</sup> Psychological disorders experienced by healthcare workers are caused by the speculation about transmission mode, speed of the infection spread, lack of treatment or vaccine protocols, lack of PPE, high workload such as treating rapidly worsening patients, unhealthy rotation of work shifts, and fear of spreading infections to nearby people.<sup>3,17,18</sup> Based on Cai et al.<sup>6</sup> research, younger healthcare



**Figure 1.** Flow chart of the literature search and selection of studies.

Table 1.

Author	Population and Criteria of Study	Design Study and Method	Intervention	Output	Outcome
Cai H, et al <sup>6</sup> (2020)	Population: 534 frontline healthcare workers during the COVID-19 outbreak. The participants included doctors and nurses from departments of infectious diseases, emergency medicine, fever clinics, and intensive care units, and included technicians from radiology and laboratory medicine, and hospital staff from the section of infection prevention throughout Hunan province between January and March 2020.	Design: cross sectional observational study.  Method: Study questionnaire included five sections and 67 questions to evaluate psychological impact and coping strategies to prevent.	Follow strict protective measures, learn about COVID-19, its prevention and mechanism of transmission, social isolation and motivating to face the COVID-19 outbreak with positive attitude	Study questionnaire for evaluation on psychological impact, coping strategies and feedback response.	Personal coping strategies in the form of supportive psychotherapy, such as: telling the difficulties experienced with family and friends, talking and motivating yourself to face the pandemic that occurs by thinking positively gives a pretty good effect.
Ping, et al <sup>11</sup> (2020)	25 Hospital University Malaysia Sabah (HUMS) nurses who were working on the COVID-19 frontline in early February 2020.	Cross sectional study	UBPI (ultra-brief psychological interventions) handbook called UC-19, which incorporate multiple techniques from various evidence based psychological interventions, including cognitive behavioral therapy (CBT), acceptance and commitment therapy (ACT), dialectical behavioral therapy (DBT), motivational interviewing (MI) and early intervention program (EIP).	Questionnaire contains responses experienced after the use of the handbook.	All participants report positive feedback on the techniques presented in the handbook.

Table 1.

Author	Population and Criteria of Study	Design Study and Method	Intervention	Output	Outcome
Blake, et al <sup>12</sup> (2020)	55 Healthcare workers, British nationals, recruited in 3 days in early March	Cross sectional study	Electronic learning package (e-digital) contains: introduction of psychological problems, how to communicate, coping strategies, social and family roles, as well as self-management and emotional control.	Questionnaire contains ease and satisfaction after the use of electronic learning guides on activities and psychological impacts experienced	82% of healthcare workers who reported using e-digital achieve satisfaction and will continue to use in the future.
Buselli, et al <sup>13</sup> (2020)	106 healthcare workers (79 female, 27 male)	Preliminary Study  Method: Screening using questionnaire (BDI-II, STAI-Y1 and STAI-Y2), psychiatric and psychological consultation, team briefing.	PsicoCovid19 (a team consist of occupational doctor, 3 psychologists, and 1 psychiatrist). Contact with hospital manager, monitoring hospital staff (symptoms, examination), psychoeducation (leaflet, visits), team briefing (case discussion), psychiatric monitoring, therapy	Beck Depression Index questionnaire (BDI), State-Trait Anxiety (STAI)-Y1 and STAI-Y2 questionnaire	Overall satisfaction with the PsicoCovid19 services.
Xiao, et al <sup>14</sup> (2020)	180 healthcare workers handling COVID-19 patients	Cross sectional study  Methods: Measuring with Self-Rating Anxiety Scale (SAS), General Self-Efficacy Scale (GSES), Stanford Acute Stress Reaction (SASR) questionnaire, Pittsburgh Sleep Quality Index (PSQI), and Social Support Rate Scale (SSRS).  Preliminary study	Social support (concern and support from other people), measure with social support rate scale (SSRS).	Self-Rating Anxiety Scale (SAS), General Self-Efficacy Scale (GSES), Stanford Acute Stress Reaction (SASR) questionnaire, Pittsburgh Sleep Quality Index (PSQI), and Social Support Rate Scale (SSRS).	Social support didn't influence sleep quality directly, but can reduce stress and anxiety, and improving self-efficacy.
Giordano, et al <sup>15</sup> (2020)	34 healthcare workers (14 doctors, and 20 nurses) work in COVID-19 unit.	Methods: Participant fill self-assessment questionnaire before and after listening music therapy. Music therapy prepared for relaxation, reduce stress and anxiety, and improving concentration. Interview for evaluation occurs once in a week. Playlist modified based on weekly interview	Music therapy listened from a headphone for 15-20 minutes, repeated until four weeks. healthcare workers were let free to decide when and how to listen to their music therapy during the weeks	Questionnaire	Questionnaire result shows that musical therapy significantly reducing stress and anxiety, improving emotional status. So as the result of modified musical therapy.

workers are more worried about infecting their families while older healthcare workers are also concerned about their own health.

There are currently several studies that report psychological interventions for healthcare workers, but not many have reported their effectiveness. In making interventions for healthcare workers, it should be known what protective factors can neutralise negative impacts during and after the pandemic. One of the most commonly reported protective factors is having social support.<sup>17</sup>

The results of the literature search showed that supportive psychotherapy is good for every setting, including emergency setting and enhancing the coping mechanism. There are some psychological interventions that are quite popular among healthcare workers. Healthcare workers are more comfortable with social support from family and work mates than from professional help.<sup>3</sup> Some of the things, colleagues can do are to start seeing signs of psychological disorders in their co-workers, such as having nightmares, difficulty sleeping, not being able to stop worrying, being restless, being irritable, and unexplained medical symptoms starting to appear. Other ways to do this are to give them the opportunity to talk, to show usable resources, to be good co-workers, to be consistent, to provide peace of mind, to support them to keep taking care of themselves, and to help them to explore the causes of stress.<sup>18</sup>

The role of individuals themselves is very important in the success of the psychological interventions, with coping strategies, such as increasing self-knowledge about COVID-19, using PPE properly, instilling positive values, making the most of rest time, music therapy, and watching TV.<sup>6</sup> Utilisation of electronic media in the form of digital learning packages, applications, and social media can be one of the efforts to reduce psychological disorders in healthcare workers. Some countries that have implemented this include Malaysia, the United Kingdom, the U.S., and Saudi Arabia.<sup>11</sup>

Research of music therapy by Giordano et al.<sup>15</sup> provides effective results in lowering the intensity of fatigue, sadness, fear, and worry. It is explained by the importance of the

psychobiological effects of music on stressful conditions which will decrease hypothalamus-pituitary-and adrenal axis action activity, resulting in the decrease of cortisol production.<sup>19-24</sup> This music therapy may also be applicable to units working in high stress conditions such as those involved in surgical procedures. In the end, such supportive psychotherapy enhances emotional state and improves the endocrine function, through limbic system and psycho-neuro-immuno-endocrine mechanism.<sup>25-29</sup>

Psychological intervention should also involve the role of organisations (in this case hospitals and governments) as policymakers and providers of facilities.<sup>13</sup> Working hours, night shifts and workload are factors that determine the well-being of healthcare workers. Several things' organisations can do to support their medical staff include providing access to counselling to psychosomatics and psychiatrists, providing accommodation for self-isolation to alleviate the concerns medical personnel that could infect their families, and providing guidance during self-isolation.<sup>18</sup>

According to Widjaja, et al,<sup>30</sup> to protect healthcare workers during the COVID-19 pandemic requires approaches from various aspects, biological, psychological, and social aspects. Psychological disorders are associated with decreased immune systems. Therefore, it is important to make psychological interventions for healthcare workers.

Shatri, et al.<sup>31</sup> stated that COVID-19 affects people in the community, including healthcare providers, as well as those who are in quarantine and people being released from quarantines. Healthcare providers in the middle of the pandemic may experience stigma and fear-associated discrimination from others in their community. To overcome such situation, firstly, we have to stay healthy physically and maintain positive energy to live a fulfilling life of becoming truly healthy people.

In the context of crises or pandemics, Psychological First Aid (PFA), especially supportive psychotherapy, becomes the basic approach clinicians can use when responding to crises. This approach is based on Maslow's hierarchy of needs in which physical needs and

safety are addressed before moving to emotional stabilisation.<sup>32</sup> The term Psychological First Aid (PFA) itself has been coined to capitalise on the analogy between bodily and psychological injuries. The main idea is that people without extensive medical knowledge or training can be taught to provide immediate help without further injuring a person.<sup>32,33</sup> As with crisis intervention, the key ingredients of PFA are empathy and compassion, and the imperatives are to reduce the risk of harm, stabilise psychological distress, and provide practical assistance, such as connecting the person with other resources.<sup>33,34</sup>

Supportive psychotherapy does not aim to change personality traits or defence mechanism, but rather to stabilise them. It has a specific meaning derived from psychoanalysis, which describes the therapist's support for the patient's adaptive or more mature personality defence. Accordingly, it can be used in otherwise well-adjusted persons experiencing stressful situations, which results in tension and distress, but it can also be used for clients who are not suitable for other more sophisticated forms of therapies. It can be used in any disorders, any age groups, and every setting including emergency and mass disaster setting<sup>32,35,36</sup>

Therefore, mental health of professionals including healthcare providers following a pandemic can expose them to burnout syndrome of caregivers. In a disaster, it can be experienced by not only healthcare workers but also other professionals such as policemen, fire fighters, and volunteers who come in contact with painful experiences. Nobody is prepared or immune to this devastating effect. In addition, we need to consider fatigue of mental status in healthcare workers. The basic intervention consists of debriefing, identifying critical incidents, helping set the situation in perspective, and reinforcing the capacity and skills of the healthcare workers. In this setting, supportive psychotherapy is very useful to control tension in their mental state.<sup>35,37</sup>

## CONCLUSION

COVID-19 pandemic's impact in healthcare workers affects not only physically but also psychologically and socially. Psychological intervention is needed, such as

doing psychotherapy, especially supportive psychotherapy, which is proved to be effective to encounter that condition in almost every setting. Families, colleagues, professional organisations, and government involvement also support successful efforts and safety for healthcare workers. Advancement in medical science, psychology, and technology have provided a newly form of psychological intervention, such as electronic media (e-book, e-package, digital learning), social media, and digital application. Furthermore, we expect more studies which learn about the effectiveness of psychological intervention for healthcare workers during COVID-19 pandemic.

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