





Artikel 8





Submission date: 21-Jan-2022 10:29AM (UTC+0700)

Submission ID: 1745176542

File name: 16.BETRIANA_et_al._2020,_IJNCP.pdf (330.09K)

Word count: 6157 Character count: 36294





Review Article

Special issue: Psychiatric and Mental Health Nursing

Open Access

Mental Health Conditions of Persons in the Community and of Health Care Workers During the COVID-19 Pandemic: An Integrative Review

Feni Betriana¹, Chihiro Kawai¹, Rian Adi Pamungkas², Yueren Zhao³, Tetsuya Tanioka^{4,*} and Rozzano C. Locsin^{5,6}

Graduate School of Health Sciences, Tokushima University, Tokushima, Japan

²Department of Nursing, Faculty of Health Sciences, Esa Unggul University, Jakarta, Indonesia

³Department of Psychiatry, Fujita Health University, Aichi, Japan

⁴Department of Nursing Outcome Management, Institute of Biomedical Sciences, Tokushima University, Graduate School, Tokushima, Japan ⁵Institute of Biomedical Sciences, Tokushima University, Graduate School, Tokushima, Japan

⁶Florida Atlantic University, Boca Raton, FL, USA

Abstract

Background: The effects of the COVID-19 pandemic are not limited to physical aspects among infected people, but also include psychological aspects among uninfected people, such as community people and health care workers. The study aimed to describe the current mental health conditions prevalent among communities and health care workers during the COVID-19 pandemic.

Method: An integrative review was conducted following the steps and framework of Whittemore and Knafl. Relevant articles were obtained from electronic databases, such as Science Direct, Scopus, PubMed, and Google Scholar using the keywords: "mental health", "Stress", "Depression", "COVID-19", "SARS-CoV-2", "health care workers", and "community people". Eighteen articles were selected that met the inclusion criteria: full text, written in English, published in 2020, original research and review articles discussing mental health conditions among health care workers and the community during the COVID-19 pandemic.

Results: Mental health conditions among community people included lower psychological well-being, anxiety, depression/depressive symptoms, fear, stress including acute stress reaction; psychological distress; COVID-19 related stress; and stress symptoms, and grief among patients' family members. Among health care workers, mental health conditions were identified as anxiety, depression/depressive symptoms, fear, insomnia, poor sleep quality, isolation, emotional disturbances, moral injury, post-traumatic disorder, burnout, and secondary traumatization.

Conclusion: Findings of this integrative review were expected to provide evidence of the mental health conditions among groups of uninfected persons and describe how they managed their health during the pandemic. Identifying mental health conditions among community people and health care workers is essential to prevent adverse psychological conditions. Mental health support practices should be made accessible to at risk persons and discriminatory actions toward frontline workers should be eliminated. Various strategies are proposed to manage mental health conditions such as rapid access to counseling, accessing information from reliable sources, maintaining healthy lifestyle and strengthening adequate coping patterns.

Publication History:

Received: October 20, 2020 Accepted: November 25, 2020 Published: November 27, 2020

Keywords:

Community people, COVID-19 pandemic, Healthcare workers, Integrative review, Mental health conditions, SARS-CoV-2

Introduction

A new type of coronavirus (novel coronavirus, nCoV), first identified by the Chinese authorities in a cluster in Wuhan, was initially reported on December 31, 2019 [1]. On March 11, 2020, the World Health Organization (WHO) declared Coronavirus Diseases 2019 (COVID-19) a pandemic as the first pandemic caused by a coronavirus [2]. As of October 22, 2020, COVID-19 has infected more than 41 million people and caused the death of more than one million people in 235 countries, areas, and territories around the world [3].

The COVID-19 pandemic produced effects not only on the physical but also on the psychological aspects of persons who were infected or uninfected in the community, particularly among the healthcare workers around the world. Pandemic-related issues such as quarantine, isolation, social distancing, and economic effects bring about psychological consequences, including fear, worry, loneliness, sadness, frustration, and helplessness [4]. However, among community people, anxiety, depression and fear constituted the crucial effects. In an online survey involving 439 respondents of the general public in 28 countries, psychological symptoms included fear of corona virus. This fear was influenced by health anxiety and exacerbated by regular

media and social media use, leading to worries about increasing the risk of transmission to their loved ones. Concerns for corona virus included: overloading of health system capacities, and economic consequences, such as unemployment [5].

Nevertheless, healthcare workers were also reported to experience anxiety, depression, insomnia [6], and discrimination [7], especially for those who worked as frontliners, and healthcare workers who were gatekeepers or initial contacts of persons who were infected with COVID 19. They reported anxiety levels reaching 25%, while depression was at 28% among both the general population and the healthcare workers in China [8]. In an extreme situation, a suicide

*Corresponding Author: Prof. Tetsuya Tanioka, Department of Nursing Outcome Management, Institute of Biomedical Sciences, Tokushima University Graduate School, 18-15 Kuramoto-cho 3, Tokushima, 770-8509, Japan, Tel: +81-88-633-9021; E-mail: tanioka. tetsuya@tokushima-u.ac.jp

Citation: Betriana F, Kawai C, Pamungkas RA, Zhao Y, Tanioka T, et al. (2020) Mental Health Conditions of Persons in the Community and of Health Care Workers During the COVID-19 Pandemic: An Integrative Review. Int J Nurs Clin Pract 7: 332. doi: https://doi.org/10.15344/2394-4978/2020/332

Copyright © 2020 Betriana et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Int J Nurs Clin Pract ISSN: 2394-4978

Page 2 of 8

case was reported when a man committed suicide because he was thought of having COVID-19 and felt he was ostracized by neighbors as evidenced by their social avoidance toward him. Eventually, the autopsy result showed the person did not have COVID-19 [4].

Given that the psychological impact of COVID-19 among uninfected people, particularly healthcare workers and community people is critical and may bring untoward effects, it is necessary to understand this phenomenon through review of the available evidence. In doing so, insights can be obtained for formulating recommendations regarding strategies to better manage mental health conditions during a pandemic in the future.

Aim of the study

The aim of this study was to explore the mental health conditions among community people and among healthcare workers during the COVID-19 pandemic through an integrative review of literature regarding this issue.

Materials and Method

Design

An integrative review was conducted following the steps of Whittemore and Knafl (2005). These steps included problem identification, literature search, data evaluation, data analysis, and presentation [9]. In this research process, both experimental and non-experimental research, and theoretical and empirical literature, was included to provide an all-encompassing perspective of the phenomenon of concern [9]. Since this is the first pandemic due to COVID-19, and integrative review was identified as the most appropriate method as it allowed a wide range of published literature providing evidence related to mental health conditions.

Data sources and search strategy

Following the Whittmore and Knafl (2005) procedure, relevant literatures were searched between July and August 2020 from four databases: PubMed, Science Direct, Scopus, and Google Scholar. Initially, the terms used to extract related studies included: "mental health," "COVID-19", "SARS-CoV-2", "healthcare workers", "Stress", "Depression", and "community people", with several combinations. Sources of data and keywords combination are presented in Table 1.

After initial identification from those databases, articles which did not meet the inclusion criteria were excluded. Afterward, titles and abstracts were screened. Irrelevant articles that did not specifically discuss about COVID-19were excluded, retaining only eligible articles. All eligible articles were examined, excluding double publications and pre-proof articles. Finally, seventeen articles were included for review. The literature search strategy is presented in Figure 1.

Criteria for inclusion of literature in the study

Relevant articles were selected based on the inclusion criteria, such as full text articles, and published in English from 2019 to August 2020. The researchers also included several types of study designs including experimental studies, descriptive studies, and qualitative studies, as well as review articles which focused on mental health issues during the COVID-19 pandemic.

Exclusion criteria of published literature

Literature without or lacking descriptions of appropriate outcome measures (e.g., studies in which researchers measured the mental health issue but did not include it in the primary outcomes) were excluded in this study. Other types of articles such as commentaries, editorials, perspectives, and articles which did not specifically discuss about COVID-19 were also excluded during the selection process.

Procedure for analyzing the data

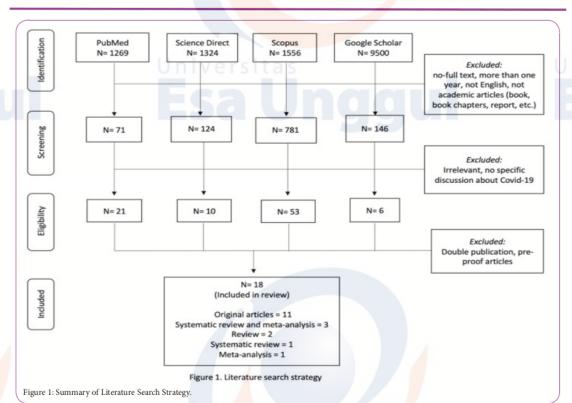
Following the data collection and analysis process formulated by Whittemore and Knafl (2005), each article was reviewed and summarized to extract the data [9]. Data extracted included date of publication, type of articles, countries/regions, samples, and main findings (see Table 2). The results were organized, and findings were discussed based on the thematic framework, comprised of the following: 1) mental health conditions among community people, and 2) Mental health conditions and psychological barriers of healthcare workers to manage the COVID-19 pandemic. Finally, strategies and recommendations to manage mental health issues during the COVID-19 pandemic were described. Figure 2 exhibits the conclusion of this integrative review [9] (see Figure 2).

Sources of data	Keyword
Pubmed	"mental health" AND "COVID-19" AND "healthcare workers"
	"mental health" AND "COVID-19" AND "community people"
	"mental health" OR "Stress" OR "Depression" AND "COVID-19"
	"mental health" AND "SARS-CoV-2" AND "healthcare workers"
Science Direct	"mental health" AND "COVID-19" AND "healthcare workers"
	"mental health" AND "COVID-19" AND "community people"
	"mental health" AND "SARS-CoV-2" AND "community people"
Scopus	"mental health" AND "COVID-19" AND "healthcare workers"
	"mental health" AND "COVID-19" AND "community people"
"mental health" OR "Stress" OR "Depression" AND "COV	
Google Scholar	"mental health" AND "COVID-19" AND "healthcare workers"
	"mental health" AND "COVID-19" AND "community people"

Table 1: Database Search and Keywords.

Int J Nurs Clin Pract ISSN: 2394-4978

Page 3 of 8



No.	Authors (Year)	Date of publication	Type of article	Country/ Regions	Sample	Main findings
1.	Li W, et al. (2020) [7]	15 March 2020	Review article	China	Health care workers and patients' family	-Mental health conditions among health care workers: isolation, discrimination, fear, emotional disturbanceMental health conditions among family of patients: bereavement and griefSuggested psychological crisis intervention:Understanding mental health status in the population, identifying people who are at risk for suicide and aggression, and provide appropriate interventions for those in need
2.	Walton M, Murray E, Christian MD (2020) [10]	8 April 2020	Review article	unspecified	Health care workers	-Mental health conditions include: Acute stress reaction including emotional; cognitive; physical; and social reaction, moral injury, such as worried to make life support decision for patients; anticipatory guilt, post-traumatic stress disorder, fear of developing symptoms, fear of having brought the illness home -Suggested interventions by institutions: providing rapid access to counseling
3.	Vindegaard N, Benros ME (2020) [22]	16 May 2020	Systematic review	China, Hongkong, Spain	Health care workers and community people (general public)	-Mental health conditions among health care workers: depression/depressive symptoms, anxiety, psychological distress, and poor sleep quality -Mental health conditions among general public: lower psychological well-being, use of words as indications of anxiety and depression, dream anxiety.
4.	de Pablo GS, et al. (2020) [11]	25 June 2020	Systematic review and meta- analysis	Unspecified	Health care workers	-Mental health conditions among physicians, nurses, trainees, and other health professionals: psychological distress, anxiety features, post-traumatic stress disorder features, depressive symptoms, insomnia, and burn out.

Int J Nurs Clin Pract ISSN: 2394-4978

Page 4 of 8

5.	Pappa S, et al. (2020) [6]	6 May 2020	Systematic review and meta- analysis	Unspecified	Health care workers	-Mental health conditions among physicians, nurses, and other healthcare workers: anxiety, depression, insomnia, mood and sleep disturbancesThe prevalence of depression and anxiety is higher in femalesNursing staff exhibited higher depression and anxiety compared to doctors.
6.	Ren X, et al. (2020) [8]	8 July 2020	Meta- analysis	China	Health care workers and community people (general public)	Prevalence among general public and healthcare workers: anxiety (25%) and depression (28%).
7.	Salari N, et al. (2020) [19]	6 July 2020	Systematic review and meta- analysis	Iran, China, Japan, Nepal, India, Iraq, UK, Spain, Nigeria, Italy	General public	Prevalence among general population during COVID-19 pandemic: stress (29.6%), anxiety (31.9%), depression (33.7%).
8.	Mertens G, Gerritsen L, Duijndam S, Salemink E, Engelhard IM (2020) [5]	10 June 2020	Original research (online survey)	Asia, Australia, Europe, Middle- East, North America, South- America, Sub-Sahara Africa	General public	-Predictors of fear of coronavirus: health anxiety, regular media use, social media use, and risk for loved oneTopics of concern related to coronavirus: health of others, healthcare collapse, consequences for the economy, mass panic, personal health, societal breakdown, personal economy (such as losing job), virus itself, unknowingly spreading virus to others, others not following rules, being in quarantine/lockdown, not trusting government, food/supplies shortage, disruption in personal routine, travel ban and fake news.
9.	Islam SMD, et al. (2020) [20]	July 2020	Original research (online survey)	Bangladesh	General public	-Mental health conditions: 85% of participants reported COVID-19 related stress, resulting in sleep shortness, short temper, and chaos in familyMain causes of stress: fear of COVID-19 infection, hampering scheduled study plan and future career, and financial difficulties.
10.	Hu D, et al. (2020) [12]	27 June 2020	Original research (Cross sectional study, online survey)	China	Nurses	-Nurses had moderate level of burnout, high level of fear, moderate and high level of anxiety and depressionThe majority of nurses reported one or more skin lesions.
11.	Sun N, et al. (2020) [13]	June 2020	Original research (Qualitative study, face to face interviews and telephone interview)	China	Nurses	Themes reflecting psychological nurses' experiences caring for patients with COVID-19 patients: -Negative emotions in early stage, including fatigue, discomfort, and helplessness because of fear and anxiety, high-intensity work, and concern of patients and family membersSelf-coping styles included psychological and life adjustment, altruistic act, team support, and rational cognition, -Growth under pressure, including increased affection and gratefulness, development of professional responsibility, and self-reflection, -Positive emotions occurred simultaneously with negative emotions.
12.	Temsah MH, et al. (2020) [14]	June 2020	Original research (online survey)	Saudi Arabia	Health care workers	-Mental health conditions among physicians, interns, nurses, midwife, auxiliary services: the anxiety level of COVID-19 was significantly higher than that from MERS-CoV or seasonal influenzaThe most frequent concern was transmitting the infection to family and friends than to themselves only.

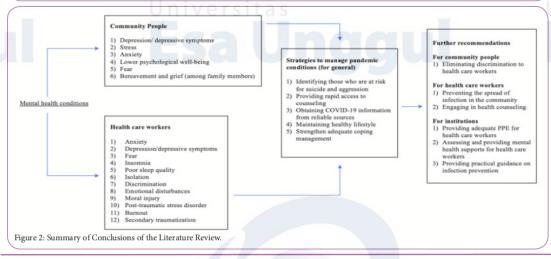
Continue...

Int J Nurs Clin Pract ISSN: 2394-4978

Page 5 of 8

13.	Liu Q, et al. (2020) [15]	29 April 2020	Original research (Qualitative study, phone interview)	China	Health care workers	Themes reflecting experiences among nurses and physicians in caring for patients with COVID-19: -Being fully responsible for patients' well-being -Challenges of working on COVID-19 wards, including exhaustion due to heavy workloads and protective gear, fear of becoming infected and infecting others, feeling powerless to handle patients' condition, and managing relationship in the stressful situation -Resilience amid challenges, including source of social support, using self-management strategies to cope with situation, and achieving transcendence from the experience.
14.	Alkhamees AA, et al. (2020) [21]	October 2020	Original research (online survey)	Saudi Arabia	General public	Mental health conditions include moderate or severe psychological impact of the outbreak, moderate to severe depressive, anxiety, and stress symptoms,
15.	Badahdah A, et al. (2020) [16]	8 July 2020	Original research (Web-based survey)	Oman	Health care workers	Mental health conditions among physicians and nurses: high prevalence of stress, anxiety, and poor psychological well-being, especially among females, young healthcare workers and those who interacted with known or suspected COVID-19 patients.
16.	Arpacioglu S, Gurler M, Cakiroglu S (2020) [17]	8 July 2020	Original research (online survey)	Turkey	Health care workers	Mental health conditions among physicians, dentists, nurses, and other healthcare workers: The anxiety, depression, and secondary traumatization scores of the front health care workers for the COVID-19 were significantly higher than those of the other health care workers or non-medical workers.
17.	Que J, et al. (2020) [18]	14 June 2020	Original research (cross- sectional, web-based survey)	China	Health care workers	-Healthcare workers include physicians, medical residents, nurses, technicians, and public health professionalsFront-line healthcare workers had a higher risk of anxiety, insomnia, and overall psychological problemsFactors for the psychological problems: negative or neutral information about pandemic, receiving negative feedback from families and friends who joined front-line work, and unwillingness to join front-line work.
18.	Wankowicz P, Szylinska A, Rotter I (2020) [32]	12 August 2020	Original research (cross- sectional, hospital- based study)	Poland	Health care workers	-Healthcare workers who were exposed to patients with SARS-CoV-2 at emergency ward, infectious wards, and ICU are at higher risk for anxiety, sleep disorders, and anxiety than healthcare workers working at other wards.

Table 2: Summary of Reviewed Articles.



Int J Nurs Clin Pract ISSN: 2394-4978

Page 6 of 8

Results

Summary of the articles

Eighteen articles met the inclusion criteria. These were reviewed and analyzed (see Table 2). There were ten original articles and seven review articles selected; these were comprised of literature reviews, systematic reviews, and meta-analysis articles. The ten articles were found in issues published during the period from March to October 2020 and were the results of studies conducted in several countries and regions including those in Asia, Australia, Europe, Middle East, North America, South America, Sub-Saharan Africa, Bangladesh, China, Saudi Arabia, Oman, Turkey, and Poland.

Eleven articles included only healthcare workers [6,10-18], while four articles included only community people [5,19-21]. Three articles included both healthcare workers and community people [7,8,22]. The summary of each article is presented in Table 2.

Presentation of Results

Mental health conditions among community people

During the COVID-19 pandemic, mental health issues were crucial among communities. Even though people in some communities were not infected with COVID-19, regardless, it was evident that this pandemic also affected their mental health condition. The review of literature found the following signs and symptoms displayed by persons during the COVID-19 pandemic: depression and depressive symptoms [19,21,22], stress [19-21], anxiety [19,21,22], lower psychological well-being [22], fear [5], and bereavement and grief of family members [7]. Among these, the most frequent conditions were depression and depressive symptoms, anxiety, and stress, in which each of these mental health conditions were evident in three articles [19,21,22].

Furthermore, it was found that regular exposure to media coverage, especially from unreliable sources continually reporting false information, increased the fear and anxiety of community people towards coronavirus. Fear of the SARS-COV-2 virus causing the COVID-19 pandemic is associated with various topics, such as fear about the danger, easy ways of contamination, and the economic consequences [23], as well as fear of the virus infecting their body and their significant others, fear of the unknown and not knowing if they are contaminated or not, and fear of inaction [24]. In addition, fear of COVID-19 is also related to the inherent risks for loved ones to be contaminated, and to personal health anxiety [5].

Mental health conditions and psychological barriers of healthcare workers to manage the COVID-19 pandemic

Healthcare workers refers to medical and non-medical workers, such as physicians, nurses in hospitals, public health nurses in the community, trainees, interns, midwives, auxiliary health workers, dentists, healthcare technicians, and public health professionals. Several mental health conditions among healthcare workers were also identified as psychological barriers to responsive management to the COVID-19 pandemic. These included: anxiety [6,8,11-14,16-18,22], depression/depressive symptoms [6,8,11,12,17,22], fear [7,10-13], insomnia [6,11,18], poor sleep quality [6,22], isolation [7], discrimination [7], emotional disturbances [7], moral injury [10], post-traumatic stress disorder [10], burnout [11],and secondary traumatization [17].

Among the aforementioned conditions, the three most frequently mentioned conditions were anxiety (identified in ten articles), depression/depressive symptoms (described in six articles), and fear (studied in five articles). These conditions were commonly seen among healthcare workers, especially those who were the frontliners at high risk of being infected, particularly when the medical supplies such as personal protective equipment (PPEs) were not adequate, as well as lack of awareness and knowledge of wearing PPEs at the beginning of the pandemic. Needing awareness of personal protection among healthcare workers at the beginning of the pandemic was a central issue that resulted in a high incidence of infected healthcare workers at the beginning and during the initial wave of the pandemic [25]. This situation increased the anxiety and fear of persons exposed to other persons while performing their work. Disseminating effective information regarding awareness, knowledge, and techniques related to PPEs for healthcare providers is therefore important.

Fear related to the COVID-19 situation of healthcare workers specifically included fear of showing symptoms, and fear of being the source of the illness one may bring home, thus affecting their family members [10]. Higher risk of anxiety was also associated with increased attention to information about the pandemic, such as joining front-line work, receiving negative feedback from families or friends who joined front-line work, and unwillingness to join front-line work [18].

Insomnia and poor sleep quality were reported as possibly caused by working long shifts and ultimately accumulating long working hours [26], including increased access to negative information about the pandemic [18]. Being exposed to moral injury regarding suffering, ethical dilemmas, and death may have occurred because of close contact with patients with COVID-19 [6], while secondary traumatization or trauma which was transferred from having been traumatized [27] occurred as healthcare workers were being exposed to COVID-19 patients [17].

Despite those mental health conditions, several positive emotions were also recognized, such as for nurses who experienced growth under pressure which was reflected through increased affection and gratefulness, self-reflection, and development of professional responsibility [13]. Healthcare providers found meaning in their experience through feeling proud of themselves for the courage and potential to overcome difficulties and thinking about what was important for them and how they wanted to cherish the present [15].

The above-mentioned mental health conditions implied that healthcare workers become vulnerable groups in the pandemic. Thus, timely interventions should enable them to manage these conditions.

Discussion of Findings

This literature review highlighted several mental health conditions that were experienced by uninfected persons, particularly community people and healthcare workers during the COVID-19 pandemic. The main reported mental health conditions were depression/depressive symptoms, anxiety, stress, and fear.

While depression is an illness that affects feelings, the way of thinking and actions related to negative information can cause feelings of sadness, leading to a variety of emotional and psychological problems [28]. Stress, on the other hand, is a nonspecific response of the body to any demand that varies with each individual depending

Int J Nurs Clin Pract ISSN: 2394-4978

Page 7 of 8

on their level of vulnerability and resilience [29]. Reviewed articles reported incidences of depression, depressive symptoms, and stress among community people and healthcare workers as measured by using several instruments such as the Depression, Anxiety and Stress Scale (DASS 21) [19,21,22], Perceived Stress Scale (PSS-10) by Cohen et al. (1983) [16], and a self-developed questionnaire related to COVID-19 [20]. Conditions of stress were reported as acute stress reactions, which refer to emotional, physical, social, and cognitive reactions or a combination of those which are normally resolved within several weeks [10]; The COVID-19 related stress reported refers to stress condition measured by a self-developed questionnaire related to COVID-19 [20].

Among persons in the community, depression/depressive symptoms, anxiety, and fear were the most frequently reported mental health conditions. These conditions can increase due to frequent access to media and social media where some information might be not reliable. Thus, it is important to inform community people to obtain information only from reliable sources. From these reliable sources, community people are expected to be informed about COVID-19, its transmission, thereby people can maintain a basic healthy hygiene, by doing the following: regularly clean their hands with an alcohol-based hand rub or with soap and water, avoid touching eyes, nose, and mouth, cover mouth and nose with a tissue or bent elbow when sneezing, clean and disinfect frequent touched surfaces, stay physically active, maintain a healthy diet, quit tobacco [30], wear a mask when outside or when communicating with others, and apply social restriction/distance especially when they need to interact with others. For those who are at risk of severe mental issues, they should get professional help and counseling.

Management of mental health conditions and psychological barriers of healthcare workers

Anxiety, depression/depressive symptoms, and fear are the most frequently reported mental health conditions among healthcare workers, especially front liners who have direct contact with COVID-19 patients. Anxiety and fear of being infected and bringing the infection to their home and loved ones are the most serious concerns. Solutions for these conditions need to be supported by institutions. Mental health counseling and adequate protective equipment should be provided by hospitals to make them feel safe and ensure their safety during the time they are performing their job.

For uninfected people, the mental health issues are mostly caused by external factors. For those who are infected and are experiencing mental health issues, the causes may not only come from external factors, but could also be from internal factors. To date, it is still not known what the direct effect of the virus SARS-CoV-2 is on the human central nervous system. Sub-acute neuropsychiatric symptoms were found to be associated with SARS-CoV-2, including depression, anxiety, and trauma-related disorders [31]. Based on previous studies on SARS-CoV-1 and MERS-CoV, the possible mechanism of neuropsychiatric manifestations in COVID-19 may include viral infiltration into the central nervous system, cytokine network dysregulation, and peripheral immune cell transmigration, post-infectious autoimmunity, and may require immunomodulatory treatments [31]. However, it is still unclear if the mental health conditions were related to the viral load itself or to the host immune response, since no study was found yet that investigates psychiatric outcomes using serology or immune markers [31].

Implications of strategies in the management of mental health issues

Specific strategies for dealing with mental health issues among healthcare workers as well as in wider communities are essential to manage the adverse effects of the COVID-19 pandemic. The specific strategies to approach the management of the mental health issues associated with COVID-19 are limited. However, from this review, a number of strategies are recommended to manage the mental health conditions: 1) identifying those who are at risk for suicide and aggression, 2) providing rapid access to counseling, 3) supplying adequate personal protective equipment for healthcare workers, 4) obtaining COVID-19 information from reliable sources, 5) maintaining a healthy lifestyle, and 6) strengthening adequate coping management.

Devising strategies to manage mental health issues during the COVID-19 pandemic requires collaboration between the community and healthcare workers (e.g. physicians, psychiatrists, nurses working in hospitals, public health nurses in the community, etc.). Public health nurses should be active in responding to the spread of COVID-19 infection by preventing the spread of infection in their area, minimizing the impact on the lives of the residents, and ensuring the safety and security of the residents. Moreover, public health nurses are advised to engage in health counseling about COVID-19, including counseling by using facilities of and in cooperation with the related organizations, to carry out infection control in group health checkups, and to promote the health management of staff.

Furthermore, as healthcare workers, especially nurses who work as frontliners may have mental exhaustion in caring for patients with COVID-19, and a plan and mental health assessment, such as screening using a depression scale, should be provided for them. In addition, zoning of clean areas and dirty areas, providing training on the use of protective equipment (personal protective equipment etc.) and the creation of an infection prevention team that gives practical guidance on infection prevention, and support from the logistic department for the frontline workers are recommended.

Limitations

This study has two limitations. First, the literature search yielded a limited number of studies which represented main mental health conditions that may not include all mental health conditions occurring in general populations, such as cases of suicide, feeling lonely and isolated, potential complicated grief among family members who could not see or attend the funeral of their family members, etc. Second, articles other than English were excluded in this review. Therefore, mental health conditions in non-English speaking countries during pandemics may not be captured well in this review. However, those studies that were retrieved followed the rigid inclusion criteria and research strategies set to assure that the studies included in this review are within the aims associated with good quality articles and represent the conditions in different countries and regions in the world.

Conclusions

The conclusions of this integrative review are presented in Figure 2.

This integrative review demonstrated the synthesis of selected literatures regarding mental health conditions among community people and healthcare workers during the COVID-19 pandemic.

Int J Nurs Clin Pract ISSN: 2394-4978

Page 8 of 8

This study also identified several strategies to manage these mental health conditions. Strategies to manage health conditions included identifying persons who are at risk and vulnerable, providing rapid access to counseling, informing people to access information from reliable sources, maintaining a healthy lifestyle, and strengthening an adequate coping style. At the beginning of the pandemic, reliable information about COVID-19 was limited. However, reliable information, especially on preventive measures and treatment methods is widely available today. Therefore, it is important to keep oneself updated by obtaining information from reliable sources.

Competing Interest

The authors declare that they have no competing interests.

References

- World Health Organization (2020) Novel Coronavirus China.
- World Health Organization (2020) WHO characterized COVID-19 as a pandemic.
- World Health Organization (2020) Corona virus disease (COVID-19) pandemic.
- Mamun MA, Griffiths MD (2020) First COVID-19 suicide case in Bangladesh due to fear of COVID-19 and xenophobia: possible suicide prevention strategies. Asian J Psychiatr 51: 102073.
- Mertens G, Gerritsen L, Duijndam S, Salemink E, Engelhard IM, et al. (2020) Fear of coronavirus (COVID-19): predictors in an online study conducted in March 2020. J Anxiety Disord 74: 102258.
- Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsi E, et al. (2020) Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: a systematic review and meta-analysis. Brain Behav Immun 88: 901-907.
- Li W, Yang Y, Liu ZH, Zhao YJ, Zhang Q, et al. (2020) Progression of mental health services during the COVID-19 outbreak in China. Int J Biol 1732-1738.
- Ren X, Huang W, Pan H, Huang T, Wang X, et al. (2020) Mental health during the covid-19 outbreak in China: a meta-analysis. Psychiatr Q 8: 1-13.
- Whittemore R, Knafl K (2005) The integrative review: updated methodology. J Adv Nurs 52: 546-553.
- Walton M, Murray E, Christian MD (2020) Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. Eur Heart J Acute Cardiovasc Care 9: 241-247.
- de Pablo GS, Vaquerizo-Serrano J, Catalan A, Arango C, Moreno C, et al. (2020) Impact of coronavirus syndromes on physical and mental health of health care workers: systematic review and meta-analysis. J Affect Disord 275: 48-57.
- Hu D, Kong Y, Lic W, Hand Q, Zhang X, et al. (2020) Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: a large-scale crosssectional study. E Clinical Medicine 24: 100424.
- Sun N, Wei L, Shi S, Jiao D, Song R, et al. (2020) A qualitative study on the psychological experience of caregivers of COVID-19 patients. Am J Infect Control 48: 592-598.
- Temsah MH, Al-Sohime F, Alamro N, Al-Eyadhy A, Al-Hasan K, et al. (2020) The psychological impact of COVID-19 pandemic on health care workers in a MERS-CoV endemic country. J Infect Public Health 13: 877-882.
- Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, et al. (2020) The experience of health-care providers during the COVID-19 crisis in China: a qualitative study. Lancet Glob Health 8: 790-798.
- Badahdah A, Khamis F, Mahyijari NA, Balushi MA, Hatmi HA, et al. (2020)
 The mental health of health care workers in Oman during the COVID-19
 pandemic. Int J Soc Psychiatry.
- Arpacioglu S, Gurler M, Cakiroglu S (2020) Secondary traumatization outcomes and associated factors among the health care workers exposed to the COVID-19. Int J Soc Psychiatry.

- Que J, Shi L, Deng J, Liu J, Zhang L, et al. (2020) Psychological impact of the COVID-19 pandemic on healthcare workers: a cross-sectional study in China. Gen Psychiatr 33: e100259.
- Salari N, Hosseinian-Far A, Jalali R, Vaisi-Raygani A, Rasoulpoor S, et al. (2020) Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and metaanalysis. Global Health 16: 57.
- Islam SMD, Bodrud-Doza M, Khan RM, Haque MA, Mamun MA, et al. (2020) Exploring COVID-19 stress and its factors in Bangladesh: a perception-based study. Heliyon 6: e04399.
- Alkhamees AA, Alrashed SA, Alzunaydi AA, Almohimeed AS, Aljohani MS, et al. (2020) The psychological impact of COVID-19 pandemic on the general population of Saudi Arabia. Compr Psychiat 102: 152192.
- Vindegaard N, Benros ME (2020) COVID-19 pandemic and mental health consequences: systematic review of the current evidence. Brain Behav Immun 89: 531-542.
- Taylor S, Landry CA, Paluszek MM, Fergus TA, McKay D, et al. (2020) Development and initial validation of the COVID stress scales. J Anxiety Disord 72: 102232.
- Schimmenti A, Billieux J, Starcevic V (2020) The four horsemen of fear: an integrated model of understanding fear experiences during the COVID-19 pandemic. Clin Neuropsychiatry 17: 41-45.
- Wang J, Zhou M, Liu F (2020) Reasons for healthcare workers becoming infected with novel coronavirus disease 2019 (COVID-19) in China. J Hosp Infect 105: 100-101.
- Pulliati S, Eissa A, Eissa R, Amato M, Mazzone E, et al. (2020) COVID-19 and urology: a comprehensive literature. BJU Int 125: 7-14.
- Motta RW, Kefer JM, Hertz MD, Hafeez S (1999) Initial evaluation of the secondary trauma questionnaire. Psychol Rep 85: 997-1002.
- 28. American Psychiatric Association (2020) What is depression?
- Fink G (2016) Stress, definitions, mechanism, and effect outlined: lesson from anxiety. In: Concept, cognition, emotion, and behavior - Handbook of stress.
- World Health Organization (2020) Coronavirus disease (COVID-19) advice for the public.
- Troyer EA, Kohn JN, Hong S (2020) Are we facing a crashing wave of neuropsychiatric sequelae of COVID-19? Neuropsychiatric symptoms and potential immunologic mechanisms. Brain Behav Immun 87: 34-39.
- Wankowicz P, Szylinska A, Rotter I (2020) Assessment of mental health factors among health professionals depending on their contact with COVID-19 patients. Int J Environ Res Public Health 17: 5849.

nggul

This article was originally published in a special issue:

Psychiatric and Mental Health Nursing

Handled by Editor(s):

Prof. Tetsuya Tanioka Department of Nursing Outcome Management Tokushima University Japan

Int J Nurs Clin Pract ISSN: 2394-4978

ORIGINALITY REPORT

8% SIMILARITY INDEX

4%
INTERNET SOURCES

5%
PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

Sofia Pappa, Nikolaos Sakkas, Elpitha Sakka.
""A Year in Review: Sleep Dysfunction and
Psychological Distress in Healthcare Workers
During the COVID-19 Pandemic"", Sleep
Medicine, 2021

1 %

Publication

García-Sierra, Rosa, Jordi Fernández-Castro, and Fermín Martínez-Zaragoza. "Work engagement in nursing: an integrative review of the literature", Journal of Nursing Management, 2015.

%

Publication

revistageintec.net
Internet Source

%

Daya Somasundaram, Nadarajah
Rajeshkannan, Balachandran Kumarendran,
Thirunavukarasu Kumanan et al. "Mental
Health Consequences from COVID-19
Pandemic and Strategies for Community Level
Recovery", Research Square Platform LLC,

<1%

2021

Publication

5	J. Wang, M. Zhou, F. Liu. "Reasons for healthcare workers becoming infected with novel coronavirus disease 2019 (COVID-19) in China", Journal of Hospital Infection, 2020 Publication	<1%
6	Min Luo, Lixia Guo, Mingzhou Yu, Haiyan Wang. "The Psychological and Mental Impact of Coronavirus Disease 2019 (COVID-19) on Medical Staff and General Public – A Systematic Review and Meta-analysis", Psychiatry Research, 2020 Publication	<1%
7	www.cdhb.health.nz Internet Source	<1%
8	en.wikipedia.org Internet Source	<1%
9	www.researchsquare.com Internet Source	<1%
10	Submitted to University of Sunderland Student Paper	<1%
11	Ashishkumar Badanapurkar, Deborah Nelson, Majid Alabdulla, Shuja Reagu et al. "Psychiatric inpatients' views of their mental health, and their experience of social change,	<1%

during the pandemic: A report from Qatar",

Journal of Psychiatric and Mental Healt	h
Nursing, 2021	

Publication

12	Katie Hooven. "Nursing Students' Qualitative Experiences in the Medical–Surgical Clinical Learning Environment: A Cross-Cultural Integrative Review", Journal of Nursing Education, 2015 Publication	<1% niversita
13	Submitted to Lenoir - Rhyne College Student Paper	<1%
14	Submitted to Trinity College Dublin Student Paper	<1%
15	"Coronavirus infections", Salem Press Encyclopedia of Health, 2021 Publication	<1%
16	Keiji Murakami, Tsuneko Ono, Darija Viducic, Shizuo Kayama, Makiko Mori, Katsuhiko Hirota, Ken Nemoto, Yoichiro Miyake. "Role for gene of in antibiotic tolerance", FEMS Microbiology Letters, 2005 Publication	<1 %
17	Submitted to Parker University Student Paper	<1%
18	psychologyandeducation.net Internet Source	<1%

19	scitechdaily.com Internet Source	<1%
20	link.springer.com Internet Source	<1%
21	Christine F. Ward, Gary S. Figiel, William M. McDonald. "Altered Mental Status as a Novel Initial Clinical Presentation for COVID-19 Infection in the Elderly", The American Journal of Geriatric Psychiatry, 2020 Publication	<1%
22	Ramla Wati, Kusrini Kadar, Takdir Tahir. "Knowledge, Attitude, Practice, Perception, and Psychological Response of Nurses Regarding Covid-19; Literature Review", Jurnal Aisyah: Jurnal Ilmu Kesehatan, 2021 Publication	<1%
23	comunicatopsi.org	<1%
24	onlinelibrary.wiley.com Internet Source	<1%
25	selfdeterminationtheory.org Internet Source	<1%
26	www.dailymail.co.uk Internet Source	<1%



FINAL GRADE	GENERAL COMMENTS	
/0	Instructor	
70		
	Universitas	Universit
PAGE 1	Esa Unggui	Esa
PAGE 2		
PAGE 3		
PAGE 4		
PAGE 5		
PAGE 6		
PAGE 7		
PAGE 8		