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RESEARCH ARTICLE

PHENOMENON OF PSYCHOSOMATIC SYMPTOMS AMONG COVID-19 PATIENTS: A SYSTEMATIC REVIEW

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ABSTRACT

Objectives: Psychosomatic consequences - such as mental disorders which are sequelae of brain damage or illness - can arise either through the direct effects of CNS infection or indirectly through immune response or medical therapy.. Taking into account that the global prevalence of the depressive disorder is estimated to be around 3.44%, our results seem to suggest that the proportion of depression in the general population was 7 times higher during the COVID-19 outbreak. This implies the substantial impact of the current pandemic situation on mental health that individual and population-level strategies should target. **Methods:** This study was conducted in accordance with the PRISMA guidelines for reporting systematic review. A researcher looked for cross-sectional studies reporting the prevalence of depression published from January 1, 2020 to October 28, 2020 using MEDLINE, via PubMed, and Web of Science. **Results:** The papers we reviewed report an association between several variables and an increase in depression rates in the general population. Associations with several variables, such as suspected COVID-19 symptoms, contact with COVID-19, reported COVID-19 death rates in the area where respondents are located, poorer personal health status, and/or a history of chronic disease is estimated. **Conclusion:** The depression that occurs in these circumstances may rarely require pharmacological treatment, at least in the short term. The COVID-19 outbreak and situation of lockdown are extraordinary circumstances requiring significant personal and social adjustments.

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INTRODUCTION

Viral contaminations are normal and some are known to taint the Central Nervous System (CNS), can causing psychosomatic side effects that influence the psychological, emotional, social, and perceptual areas. Extreme ailment of different etiologies because of ensuing mental dismalness, probably some of which is because of the mental effect of trauma.[1] Coronavirus is a solitary abandoned RNA infection and a few subtypes influencing people have been distinguished, generally causing gentle upper respiratory lot contaminations in immunocompetent individuals.[2] Coronavirus has likewise been identified in the mind and cerebrospinal liquid of people with seizures, encephalitis, and encephalomyelitis. New strains of the Covid caused a serious intense respiratory condition (SARS) flare-up, beginning in 2002, and an episode of Middle East respiratory disorder (MERS), beginning in 2012.[3] In Indonesia the quantity of cases to date is 415,402 cases and keeps on developing. As the pandemic of the sickness presently known as COVID-19 has spread, the psychosomatic ramifications of the illness are progressively being perceived. There are a coupleobjectives why the current COVID-19 pandemic could possibly have psychosomatic results.[4] A portion of these reasons identify with the more extensive social effect of the pandemic and the public authority reaction, including physical separating and isolate measures. Both contaminated and uninfected populaces might be helpless because of specific encounters, for example, far reaching nervousness, social segregation, weight on medical services laborers and other significant specialists, and joblessness and monetary difficulty. Different encounters might be explicit to people who are tainted with the infection, for example, worries about the result of their sickness, shame, and amnesia or horrible recollections of serious illness.[5] Psychosomatic outcomes -, for example, mental problems which are sequelae of cerebrum harm or disease - can emerge either through the immediate impacts of CNS contamination or

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by implication through invulnerable reaction or clinical treatment. A case arrangement from Wuhan found that among patients hospitalized for SARS-CoV-2 disease, 36% had neurological highlights, generally comprising of gentle side effects, for example, dazedness and cerebral pain, despite the fact that these indications might be all the more an appearance of foundational sickness. than a particular neurological condition. A few patients experience the ill effects of intense cerebrovascular illness or disabled cognizance as a feature of their infection. SARS-CoV-2 enters human host cells by the angiotensin-changing over catalyst 2 receptor, which has little articulation in the brain.6 There is theory that another course of CNS penetration may prompt respiratory disappointment brought about by SARS-CoV-2 contamination, albeit at present there is no proof. There is primer in-vitro proof that - maybe not at all like the SARS Covid (SARS-CoV) - SARS-CoV-2 can imitate in nerve cells, yet the interpretation of these discoveries to in-vivo guideline is unclear.[7] Even if extreme psychosomatics outcomes were proportionately uncommon, huge quantities of individuals around the globe would be influenced. Past flu pandemics have been connected to enduring mental outcomes, for example, sadness. Accordingly, it is conceivable that other viral contaminations for an enormous scope may cause progressing mental morbidity.[8]

Patients with gloom may likewise have negative mentalities to antiviral treatment, which can decrease their medicine adherence and recuperation. Past investigations have discovered that patients can encounter diligent gloom even after a flare-up of an irresistible sickness. For instance, the commonness of discouragement among SARS patients was 18% at multi month after release from emergency clinic. Considering a portion of the revealed mental outcomes of COVID-19 and its spread, and the absence of general insights on the point all around the world, we expect to inspect and efficiently survey and investigate the writing on the effect of COVID-19 on clinical sorrow.[9]

MATERIALS AND METHODS

Studies are incorporated if: (1) reports cross-sectional information on the commonness of wretchedness during the COVID-19 episode; (2) they specified themselves in community-based studies; (3) they depict the techniques used to evaluate or analyze discouragement; (4) full content is accessible. We avoided contemplates that zeroed in on explicit examples (e.g., clinical experts, patients, teenagers), and survey articles. A pre-planned information extraction structure was utilized to remove data on the accompanying factors: nation, test size, general degree of gloom, extent of ladies, mean age, instrument used to evaluate sorrow, reaction rate, and inspecting technique. Articles chose for recovery were evaluated by three analysts for methodological legitimacy before they were remembered for the audit. Any differences that emerge between commentators are settled through conversation, or by additional conversation among reviewers.

RESULTS

Figure 1 shows a flow chart of the literature search strategy and study selection process. Initially, 105 potential records were identified, 38 of which were taken from PubMed, 41 taken from Science Direct and 26 from the British Medical Journal (BMJ). The titles of the remaining 28 articles were read and 12 of them were excluded for not meeting the inclusion criteria. Furthermore, abstracts of the remaining 16 articles were read and 9 articles were removed because it was not a cross-sectional study, did not analyze depression prevalence and because it was not a community-based study. We added 2 more articles found by manual search of other databases and lists of references. After reading these 18 articles in full, we finally included 7 in our systematic review. Table 1 summarizes the characteristics of the included studies, 5 of which were from China, 1 from Vietnam, and 1 from Italy. The example size went from 600 to 7,236 members, and the mean age went from 32.20 to 49.10 years in the nine examinations revealing it. All investigations included the two people, and the level of ladies went from 46.80% to 71.66%, with most of ladies being most of them. All investigations were led utilizing an online poll, and of the individuals who announced them, everything except one utilized a non-randomized testing technique. Reaction rates were accounted for by 7 examinations and went from 66.66% to 99.17%. All examinations measure discouragement utilizing normalized scales, the most common being the Depression, Anxiety and Stress Scale (DASS) and the Patient Health Questionnaire (PHQ). The study reported a wide range of prevalence values for depression, ranging from 7.45% to 48.30%. The risk of a bias score ranged from 6 to 7 out of a total likelihood of 9, with a mean score of 6.4. The most common limitations are: (a) participant recruitment is not appropriate or the sample is not clearly representative of the population, and (b) response rates are not reported, or the large number of non-responders.

DISCUSSION

A current precise review of seven enormous examinations shows that the total predominance of despondency in everyone during the COVID-19 flare-up is 25%. The primary wellspring of heterogeneity in the predominance paces of despondency among the examinations remembered for this meta-investigation was the scale utilized for the examination, with the most elevated commonness rates in examinations utilizing the WHO-5 and DASS-21 scales, and the least in those utilizing the PHQ-9 scale.[10]Also, the utilization of self-announced information can infer inclinations, for example, social attractive quality predisposition, or be less viable than standard clinical meetings, so that in the end the scale, even the norm, is altogether different. The latest gauge of the pervasiveness of worldwide sorrow is from 2017 and speaks to an extent of 3.44% (territory somewhere in the range of 2 and 6%).[11] This gauge, in view of Global Burden of Disease information, incorporates dysthymia and significant burdensome problem and depends on investigations that report predominance paces of wretchedness dependent on clinical information, the study of disease transmission, reviews, and meta-relapse demonstrating. Our outcomes recommend that downturn rates in everyone may have been multiple times higher during the COVID-19 episode. Overall, 14% bigger than the gauge dependent on the demonstrative meeting. The revealing point predominance rate for the past despondency meta-examination from epidemiological investigations utilizing side effect scales and demonstrative instruments, indicated a worldwide pervasiveness of sadness of 4.70% in 2010, when considering methodological contrasts. In any case, a meta-investigation consolidating information from 30 nations from 1994 and 2014 and utilizing just network examines utilizing self-detailed instruments found a commonness of 17.30% (95% CI = 15-19.90%).[13]

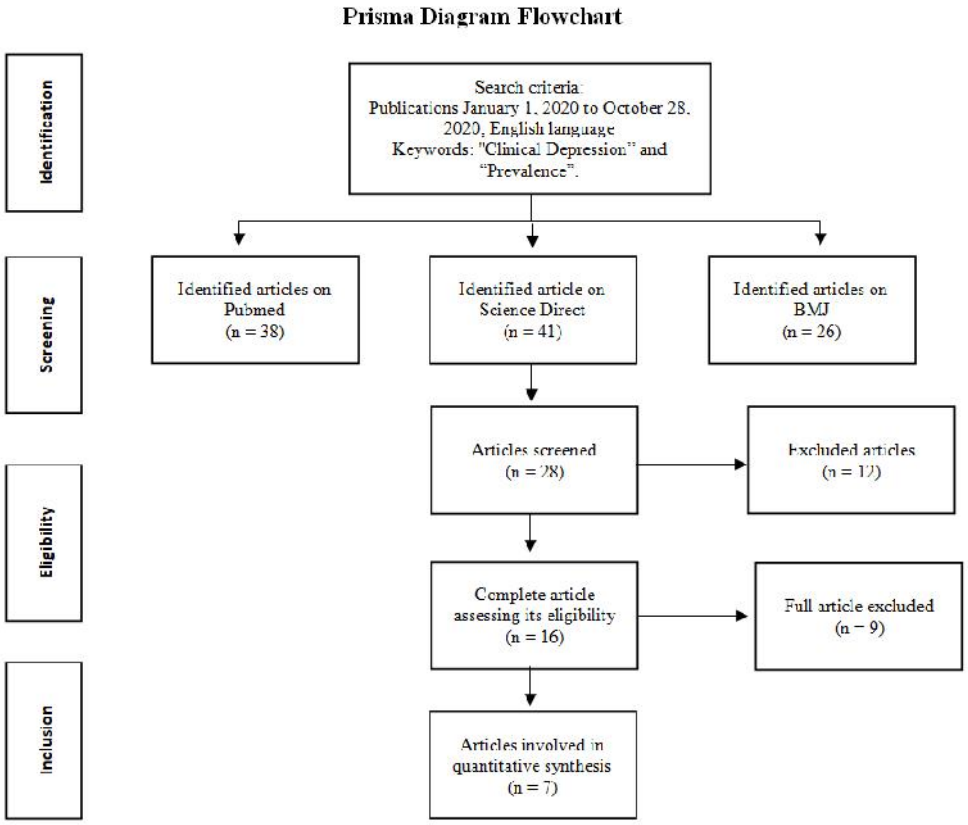

Figure 1. The PRISMA flowchart in identifying the literature included

Table 1. Characteristics of studies

Depression prevalence (%)	37.10%	48.30%	20.10%	14.70%	32.70%	7.40%	19.20%
Depression Measurement	BDI-II	WHO-5	CES-D	SDS	DASS-21	PHQ-9	PHQ-9
% Females	46.80% (503)	67.70% (3267)	54.60% (3952)	61.30% (976)	71.66% (1982)	55.70% (1047)	60.80% (959)
Mean age	33.54	32.20	35.30	32.30	32.94	44.40	45.44
Sample size	1074	4872	7236	1593	2766	3947	1577
Sampling technique	Convenience sampling	Convenience sampling	Convenience sampling	Convenience sampling	Convenience sampling	Convenience sampling	Convenience sampling
Author	Ahmed *et al.* (2020)	Gao *et al.* (2020)	Huang & Zhao (2020)	Lei *et al.* (2020)	Mazza *et al.* (2020)	Nguyen *et al.* (2020)	Ni *et al.* (2020)

Note. BDI-II = Beck depression inventory-second edition; WHO-5 = World Health Organization five well-being index; CES-D = Center for Epidemiologic Studies-Depression scale; DASS-21 = Depression, Anxiety and Stress scales; PHQ-9 = Patient Health Questionnaire; SDS = Sheehan Disability Scale.

Thus, and in spite of methodological difficulties when contrasting the outcomes and past information, our discoveries actually recommend that the pervasiveness paces of despondency during work and COVID-19 seem to have expanded fundamentally. The paces of despondency revealed in everyone during the past plague episodes (SARS and Ebola) were somewhere in the range of 3% and 73.10%, and were generally lower than the paces of misery during the COVID-19 flare-up that we have recognized here.

These previous pestilences could be contained all the more rapidly and, despite the fact that the death rate is higher, the disease rate is lower, which may clarify the lower commonness of burdensome manifestation levels.[14]Likewise, the length and vulnerability of the lockdown added to higher paces of discouragement during the SARS episode in Canada. Along these lines, the current lockdown estimates upheld around the globe could likewise clarify the higher paces of burdensome side effects saw during the COVID-19 outbreak.[15]

Our examination bolsters the requirement for combination of emotional wellness contemplations into COVID-19 consideration, remembering observing of mental side effects and social requirements for everyone. Sorrow is an ordinary response to life conditions that out of nowhere disintegrate, which includes partition and uncertainty.[16] When individuals are presented to wild occasions, they show powerlessness and an absence of inspiration, with discouragement as an outcome. In such manner, subjects with wretchedness are more averse to look for help for either physical or mental manifestations; Thus, and like nervousness, melancholy can turn into a boundary to levelheaded emotional wellness and clinical intercessions during a pandemic. The emotional well-being of everybody should be set on the public and worldwide general wellbeing plan, with fitting mental help gave by governments or public bodies.[17] The papers we explored report a relationship between a few factors and an expansion in sadness rates in everyone. Relationship with a few factors, for example, suspected COVID-19 indications, contact with COVID-19, revealed COVID-19 passing rates in the zone

where respondents are found, less fortunate individual wellbeing status, and additionally a background marked by constant illness is estimated.[18] furthermore, expanded paces of sorrow were reliably discovered to be identified with factors not identified with wellbeing, for example, more youthful age. Truth be told, a few investigations have discovered higher paces of melancholy, particularly among understudies. Youthful populaces can be more defenseless against vulnerability about the fate of occupations, vocations and financial emergencies and they are likewise more presented to web-based media. Curiously, regardless of the way that normal reports on COVID-related wellbeing data seem to diminish despondency, it is additionally proposed that web-based media presentation is related with wretchedness and tension just as blended depression.[19]

Online media can promptly produce a surge of dread during the fast spread of the illness, notwithstanding the genuine dangers and upheld by prominence that is immediately accomplished by posts with incorrect data ('counterfeit news'). Financial factors, for example, joblessness, low societal position, absence of social help and monetary misfortunes can likewise add to higher paces of depression.[20] There are additionally reports of the impact of character characteristics on gloom rates during the COVID-19 episode, revealing higher paces of discouragement in people with higher antagonistic impact and separation scores. They additionally discovered higher weakness for people with a background marked by distressing circumstances. The connection among despondency and uneasiness was additionally often seen in two investigations.[21] The sadness that happens in these conditions may once in a while require pharmacological treatment, in any event temporarily. The COVID-19 flare-up and circumstance of lockdown are exceptional conditions requiring huge individual and social changes. Accordingly, this setting explicit despondency can be overwhelmed by strong intercessions, for example, consolation and arrangement of precise data, and by enabling people to settle on educated choices and assisting them with booking exercises to keep up mental and physical balance.[22] It is proposed that solid practices during isolate, for example, more actual work and more advantageous eating, may likewise help battle depression.[23]

Considering that the by and large worldwide pervasiveness of burdensome problem is assessed to be around 3.44%, our outcomes imply that the extent of despondency in everyone was multiple times higher during the COVID-19 outbreak.[24] This suggests a sizeable effect. from the current pandemic circumstance to emotional well-being which should be focused by individual and populace level methodologies. This creating circumstance requires the deliberate endeavors of established researchers to add to populace observation during isolate and the COVID-19 episode and to examine the negative effect on mental prosperity in the short and long haul.[25]

REFERENCES

1. Rabiee A, Nikayin S, Hashem MD, et al., 2016. Depressive symptoms after critical illness: a systematic review and meta-analysis. *Crit Care Med.*, 44: 1744–53.
2. Nikayin S, Rabiee A, Hashem MD, et al., 2016. Anxiety symptoms in survivors of critical illness: a systematic review and meta-analysis. Gen Hosp Psychiatry; 43: 23–29.
3. Parker AM, Sricharoenchai T, Raparla S, Schneck KW, Bienvenu OJ, Needham DM. Posttraumatic stress disorder in critical illness survivors: a metaanalysis. Crit Care Med 2015; 43: 1121–29.
4. Lu R, Zhao X, Li J, et al., 2020. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. Lancet; 395: 565–74.
5. Desforges M, Le Coupanec A, Dubeau P, et al., 2019. Human coronaviruses and other respiratory viruses: underestimated opportunistic pathogens of the central nervous system? Viruses; 12: 14.
6. Bohmwald K, G.lvez NMS, R.os M, Kalergis AM. 2018. Neurologic alterations due to respiratory virus infections. Front Cell Neurosci 2018; 12: 386.
7. Petrosillo N, Viceconte G, Ergonul O, Ippolito G, Petersen E. 2020. COVID-19, SARS and MERS: are they closely related? Clin Microbiol Infect 2020; published online March 28. DOI:10.1016/j.cmi..03.026.
8. WHO. 2018. The ICD-11 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization.
9. WHO. 2020. Mental health and psychosocial considerations during the COVID-19 outbreak. March 18,. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf (accessed October 31th, 2020).
10. The Lancet Psychiatry. Send in the therapists? Lancet Psychiatry 2020; 7: 291.
11. Lewnard JA, Lo NC. 2020. Scientific and ethical basis for social distancing interventions against COVID-19. Lancet Infect Dis; published online March 23.
12. Brooks SK, Webster RK, Smith LE, et al., 2020. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet 395: 912–20.
13. Asmundson GJG, Taylor S. 2020. Coronaphobia: fear and the 2019-nCoV outbreak. *J Anxiety Disord*, 70: 102196.
14. Greenberg N, Docherty M, Gnanapragasam S, Wessely S. 2020. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ; 368: m1211.
15. Chaves C, Castellanos T, Abrams M, Vazquez C. 2013. The impact of economic recessions on depression and individual and social well-being: the case of Spain (2006–). Soc Psychiatry Psychiatr Epidemiol 2018; 53: 977–86.
16. Xiang Y-T, Yang Y, Li W, et al., 2020. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry., 7: 228–29.
17. Siu JY. 2008. The SARS-associated stigma of SARS victims in the post- SARS era of Hong Kong. *Qual Health Res.*, 18: 729–38.
18. Jones C, Humphris GM, Griffiths RD. 1998. Psychological morbidity following critical illness—the rationale for care after intensive care. Clin Intensive Care; 9: 199–205.
19. Mao L, Jin H, Wang M, et al., 2020. Neurologic manifestations of hospitalized patients with coronavirus disease 2019 in Wuhan, China. JAMA Neurol; published online April 10.
20. Li Y, Bai W, Hashikawa T. 2020. The neuroinvasive potential of SARS-CoV2 may play a role in the respiratory failure of COVID-19 patients. J Med Virol; published online Feb 27.
21. Yan R, Zhang Y, Li Y, Xia L, Guo Y, Zhou Q. 2020. Structural basis for the recognition of SARS-CoV-2 by full-length human ACE2. Science; 367: 1444–48.

22. Chu H, Chan JF-W, Yuen TT-T, et al., 2020. Comparative tropism, replication kinetics, and cell damage profiling of SARS-CoV-2 and SARS-CoV with implications for clinical manifestations, transmissibility, and laboratory studies of COVID-19: an observational study. Lancet Microbe; published online April 21.
23. Pleasure SJ, Green AJ, Josephson SA. 2020. The spectrum of neurologic disease in the severe acute respiratory syndrome coronavirus 2 pandemic infection. JAMA Neurol; published online April 10.
24. 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 published online April
25. Kępińska AP, Iyegbe CO, Vernon AC, Yolken R, Murray RM, Pollak TA. 2020. Schizophrenia and influenza at the centenary of the 1918–1919 Spanish influenza pandemic: mechanisms of psychosis risk. *Front Psychiatry*, 11: 72.

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