"Incidence and severity of mental health problems during covid-19 pandemic among people"

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ABSTRACT

The global COVID-19 pandemic has generated major mental and psychological health problems globally. This pandemic proved to be a major health crisis that has changed the lifetime of millions globally. The novel corona-virus 2019 (COVID-19) has become an epidemic affecting health and well-being globally. In addition, with physical, social and economic health, psychological impacts of this disease are progressively being stated within the scientific studies. During this systematic review and meta-analysis, articles focusing on the prevalence of stress and anxiety in the general population during the COVID-19 pandemic include Science Direct, Embase, Scopus, PubMed, Web of Science (ISI), and the Google Scholar database. It was searched in. Until May 2021 without shortening the deadline. The prevalence of stress in 7 studies with a total sample size of 1084 was 29.6% (95% confidence limit: 24.3-35.4), and the prevalence of hysteria in 17 studies with a sample size of 65,439 was 32.9% (95% confidence). LevelInterval: 27.6–36.6), therefore, the prevalence of depression in 14 studies with a sample size of 44,531 and 33.7% (95% confidence interval: 27.5–40.6). COVID19 not only causes physical health problems, but also causes various mental disorders. The epidemic of the new coronavirus can affect the mental health of individuals in some communities. Therefore, it is essential to develop psychological interventions that maintain people's mental health and improve the mental health of vulnerable groups during the COVID 19 pandemic.

INTRODUCTION

In year 2019 during month of December, within the city of Wuhan, China, uncommon subjects with pneumonia allegedly infected from new Coronavirus (COVID-19) were reported[1], and henceforth the rapid blow-out of the virus turn out to be a worldwide health threat.[2] There are numerous viral ailments in the past 20 years along with "Severe Acute Respiratory Syndrome (SARS)" in 2003, Influenza virus with the H1N1 subtype in 2009, "Middle East Respiratory Syndrome (MERS)" in 2012, and "Ebola virus" in 2014.[3,4,5]

Although, COVID-19 being a newer strain of coronaviruses, is known to cause illness starting from cold to more severe disease like SARS and MERS.[5] Coronavirus infection involved symptoms like malaise, cold, cough, pharyngitis, muscle pain, nausea, vomit and diarrhoea. People suffering from mentioned symptoms were possibly infected with the virus and would have experienced dangerous outcomes.[6] Intense cases of the disease even have caused cardiac issues, acute respiratory distress syndrome resulting in cardiac and respiratory failure which further resulted in death.[7] In addition to physical impact, COVID-19 had serious effect on psychological state of people.[8] A wide range of psychological outcomes were observed at individual, community, national and international levels. As an individual, people are much likely to incident fear of falling sick or dying, helplessness and being lebelled by others.[9] The pandemic caused a damaging effect on the general psychological state of public which would haved even turned into psychological crises.[10] Identification of mental disorders in its early stages makes the intervention strategies less troublesome. Health crises during the COVID-19 pandemic caused psychological changes, not only within the medical professionals but, also among the citizens, and such psychological changes are instigated by fear, anxiety, depression, or insecurity.[11]

Nervousness and anxiety within the community has disturbed everyone extensively. Latest evidence revealed that folks who were being isolated and stayed in quarantine, had gone through the mindsets like hysteria, resentment, delirium and stress.[12] Most of the studies that have reported psychological disorders during the COVID-19 pandemic have found the conclusion that affected individuals show several symptoms like emotional distress, depression, stress, mood swings, irritability, insomnia, attention deficit hyperactivity disorder, post-traumatic stress, and anger[12,13,14,] which are clearly suggestive of people being mentally unhealthy.

Studies have also revealed about frequent media exposure leading to agony.[15] Nevertheless, the prediction of accurate level of phychological and emotional devastation related to COVID-19 is still a challange. Studies conducted in China, the primary country that was suffering from this recent Virus spread, show that people's fear of the unknown nature of the Virus can cause mental disorders.[16]

Psychological health of people was affected at several strata of community because of the virulancy and pathogenicity of the virus, contamination speed which led to the high death rate. COVID-19 initiated from the diseased patients and health care workers while they were taking care of patients or their own families who had suffered from mental disease and even workers in other sectors werenot forbidden from getting infected [17,18,19]

METHOD

For resourcefulness in this systematic review article and meta-analysis, the publications among Science Direct, Embase, Scopus, PubMed, Web of Science (ISI) and Google Scholar databases were studied. In order to spot the articles, keywords related to Coronavirus, COVID-19, 2019-ncov, SARS-cov-2, mental disease, psychological state problem, Distress, Anxiety, Depression along with all possible combinations were used .

Coronavirus [Title/Abstract]) OR (COVID-19[Title/Abstract])) OR (2019-ncov [Title/Abstract])) AND (SARS-cov-2[Title/Abstract])) AND (Mental illness [Title/Abstract])) OR (Mental ill health [Title/Abstract])) AND (Anxiety [Title/Abstract])) AND (Social Anxiety [Title/Abstract])) OR (Anxiety Disorders [Title/Abstract])) AND (Depression [Title/Abstract])) OR (Emotional Depression [Title/Abstract])) OR (Depressive Symptoms[Title/Abstract]

No deadline was contemplated during the search process, and hence the meta-data of the recognised studies was compiled into a software for end-note reference management. so as to conduct a comprehensive search, the listings of reference in all of the gathered article were reviewed manually.

Inclusion and exclusion criteria

Criteria for participation in a systematic review include: One study investigating the prevalence of stress, anxiety, and depression in the general population during a COVID19 pandemic: Two observational studies (ie, non-intervention studies) Three studies for which the full text was available. Criteria for excluding studies are 1 independent study, 2 inadequate data studies, 3 duplicated data, 4 method-unclear studies, 5 intervention studies, 6 case reports, and full text. Was 7 articles that were not available.

Study selection

Firstly, duplicate articles found repeatedly in different databases were removed. Secondly, a title list was being created for all the remaining articles so that articles could be excluded in a structured way during the evaluation. As part of the first phase of the systematic review process, i. H. The review carefully checked the

titles and summaries of the remaining articles and removed various articles in consideration of inclusion and exclusion criteria. In the second stage, eligibility assessment, the full text of the studies remaining from the screening stage was thoroughly checked according to the criteria, as well as various other unrelated studies were excluded.

To discourage subjectivity, article review and data extraction activities were carried out independently by two reviewers. If the document was not included, the reason for the exclusion was given. If there was a disagreement between the two reviewers, a third person reviewed the article. 17 studies have entered the third stage. H. In quality evaluation.

Data extraction

Data from all recent studies were extracted using a separate prepared checklist. The checklist included the title of the article, the name of the first author, the year of publication, the location of the survey, the sample size, the survey method, gender, the type of survey, the prevalence of stress, depression and anxiety.

The COVID-19 pandemic increased the prevalence of mental health problems

Since the outbreak of COVID19, depression, anxiety, stress and insomnia have been reported more than usual. In a previous study, 6.67% (95% CI: 5.91% – 7.31%) of the total population of the United States had major depression (Kessler et al., 2003) and 10.8% (95% CI: 9.11% – 12.52%).) And 14.71% (95% CI: 12.71% - 16.5%) of 3,001 adults randomly selected from the general Swedish population had depression or anxiety in 2009 (Johansson et al). ., 2013). Elsewhere, 6.2% (95% CI: 3.4% – 10.4%) of Panama's indigenous adult population reported experiencing severe psychological distress under normal circumstances (Walker et al). ., 2019). All of these rates were much lower than any of the populations included in my analysis. Similarly, the prevalence of insomnia in the general population of Turkey before the outbreak of COVID 19 was 12.2% (95% CI: 11.2% – 13.1%) (Benbir et al., 2015), insomnia during a meta-analysis. The prevalence of was reported in the general population of China at 15.0% (95% CI: 12.1% – 18.5%) (Cao et al., 2017). A relatively high prevalence of insomnia of 27.3% has been reported in the US adult population (Olfson et al., 2018), which is 47.3% and 31.8 among non-healthcare professionals and physicians / nurses.

Therefore, a surge in prevalence of mental health problems emerged from COVID 19, as previously seen after other new illness epidemics and natural disasters. All major emergencies, not just COVID19, definitely cause mental health problems. Previous outbreak studies have shown that approximately 35% of SARS survivors in Hong Kong and 31.2% of those isolated due to SARS in Toronto reported anxiety and / or depressive symptoms (Cheng et al. , 2004; Hawryluck et al., 2004). In addition, in a meta-analysis of 27 studies, psychological distress (overall standardized mean difference = 0.63, 95% CI: 0.27-0.98, p = 0.005) and mental illness (total odds ratio = 1.84, 95% CI).) Was found: 1.43 to 2.38 after the natural disaster, p <0.001

(Beaglehole et al., 2018). With the continued epidemic of COVID19, more attention should be paid to the potentially harmful effects on the mental health of the entire population (Cui et al., 2020). Physical activity has had a positive effect on mental status (Lavie et al., 2016) and immunity (Laddu et al., 2020). Containing and assisting physically active individuals during the COVID 19 pandemic can reduce the risk of mental health problems and achieve optimal immune support (Hall et al., 2020).

Strengths and limitations

This study has several advantages. First, as far as I know, this is often a major systematic review and meta-analysis of various mental health issues associated with COVID 19. In addition, multiple populations were involved, including patients with non-communicable chronic diseases and college students. We then applied a comprehensive search strategy to find relevant studies and finally analyzed 66 studies, 24 studies from the preprint database. Finally, both English and Chinese articles were included in this meta-analysis.

 As the first country to suffer from COVID 19, China's population was asked early on about mental health issues. Therefore, an analysis that seeks to address this issue comprehensively should include Chinese studies. My research also had some limitations. All studies in my analysis are regular and may reflect the mental state of the population over your period. However, mental states change over time and with changes in the environment. Therefore, the psychological impact of the COVID19 disaster needs to be presented in a longer and more positive time frame. Follow-up surveys often help reveal the mental state of the future population. Some research papers used equivalent tests for population screening during this meta-analysis, but there were still some studies that followed different scales to assess stress, anxiety, and depression.

DISCUSSION

During the COVID19 pandemic, highly educated people had higher levels of hysteria, depression, and stress. Consistent with recent studies, there is a link between educational levels during the COVID 19 pandemic and levels of anxiety and depression. According to a study conducted in China, the prevalence of psychiatric symptoms among more educated people may be due to the group's high self-esteem for their health. In addition, the level of anxiety is much higher for those who have at least one loved one, relative, or lover with COVID 19 disease.

 Recent studies have revealed a link between medical records and the increase in anxiety and depression caused by the spread of COVID19. Previous studies have shown that medical history and chronic illness are associated with increased levels of mental distress. People who have a history of medical problems and are also affected by poor health may feel more vulnerable to surrogate illness. Governments and public health authorities need to provide accurate information about the pandemic situation in a timely manner, uncover rumors, and reduce the impact of false information on public sentiment. These high-level activities end with peace and potential psychological interests. Governments and health authorities need to ensure that infrastructure is provided to

store the right amount of personal protective equipment (PPE). COVID19 Pandemic masks, hand sanitizers and other personal care products.

Optimistic and positive thoughts and attitudes towards the spread of COVID 19 are also protective factors for depression and anxiety. Providing counseling using electronic devices and applications can reduce the psychological damage caused by COVID19 and promote social stability. Increased infections and deaths can affect the symptoms of depression and anxiety. During the H1N1 epidemic, fear peaked at the peak of the epidemic and diminished as it diminished.

CONCLUSION

Within a few months, the COVID 19 pandemic caused a state of emergency around the world. In addition to raising general public health concerns, this infectious virus has also caused a variety of psychological and psychological disorders. Consistent with my analysis, it is often concluded that the COVID 19 pandemic can affect the mental health of individuals and diverse communities. Therefore, in the present crisis, it is important to identify people in different groups and occupations that are vulnerable to mental illness. This allows the mental state of the entire population to be maintained and improved with appropriate psychological strategies, techniques and interventions.

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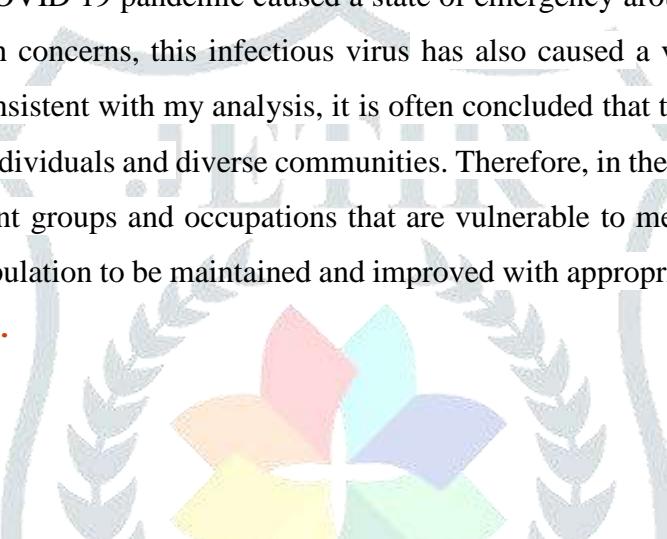
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