



## Psycho-social impacts of COVID-19 pandemic in developing countries: a scoping review

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### ABSTRACT

**Background/Objectives:** One of the recent pandemics that has ravaged the world is the coronavirus popularly known as COVID-19, which is a large family of viruses known to cause illnesses ranging from the common cold to acute respiratory tract infection. There is no doubt that the fear of COVID-19 pandemic with its resultant lockdown effects on the social environment may impact the psycho-social health or well-being of individuals, communities or societies, with variations on regional or country-specific geographic. This paper examined views, reports and experiences from developing countries considering that the definition of pandemics takes a geographic perspective. The paper examined the typologies of psycho-social impacts due to the COVID-19 pandemic. The aim of the research was to conduct a scoping literature review of the psycho-social impacts of COVID-19 pandemic in developing countries of the world. **Design/Method:** This study was a scoping review of the related literature review conducted using search engines to review grey and published literature. **Results:** A total of 1,236 articles that discussed COVID-19 were retrieved, out of which 1,197 were excluded based on the predetermined criteria. Only 39 articles met the inclusion criteria, focusing on psycho-social impact studies that were conducted in developing countries. COVID-19 pandemic accompanied by a partial or total lockdown instigated psycho-social disorders across in thirty (31) developing countries. The following 17 typologies/dimensions of psycho-social disorder due to COVID-19 were identified: Sleeping problems, depression, anxiety, suicidal tendencies, frustration, psychosomatic disorders, loneliness, obsessive-compulsive symptoms, fear, worry, aggression, post-traumatic stress disorder, confusion, stigmatization and discrimination, helplessness, irritability and denial. **Conclusion:** COVID-19 is a global problem that came as a shock to the entire world. Many protocols were reeled out to prevent the continuous spread of the pandemic. The protocols and the pandemic itself came with enormous psycho-social problems, many of which have been reviewed in this piece. COVID-19 caused a lot of psycho-social consequences or disorders among individuals and households. Governments should integrate psycho-social support interventions in the COVID-19 health packages.

**Keywords:** Anxiety; COVID-19; Depression; Insomnia; Psycho-social impact

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### INTRODUCTION

Literature indicates that pandemics are large-scale outbreaks of infectious diseases that may greatly increase morbidity and mortality over

a wide geographic area and cause significant economic, social, and political disruption<sup>1</sup>. It is evident that pandemics have occurred throughout history and appear to be increasing in frequency,

particularly in recent times<sup>2</sup>. Pandemics generally trigger multi-dimensional distress, ranging from social, emotional, spiritual or physical pain or suffering that may cause people to feel sad, afraid, or depressed, among other forms of distress reactions or conditions<sup>3-6</sup>. Even in cases, where these psycho-social conditions already exist, they may be intensified or may precipitate others. This is especially due to control measures associated with the pandemic<sup>7</sup>. Although the general impact of pandemics is beyond the scope of this paper, available evidence shows that the level or type of distress that may be prevalent due to pandemics may be dependent on the type and origin of the pandemic, spread risks, internal and external factors, socioeconomic and socio-demographic characteristics of an individual, community, or society. On many occasions, developing countries are most affected by pandemics given their impact on the economy, politics, trade and globalization<sup>8-10</sup>.

One of the recent pandemics that has ravaged the world is the corona-virus popularly known as COVID-19, which is a large family of viruses known to cause illnesses ranging from the common cold to acute respiratory tract infection<sup>11</sup>. COVID-19 infection was first discovered in 2019 in Wuhan, China and pronounced a pandemic disease in 2020<sup>7,12,13</sup>. Being a new infection with its viral nature, its control measures necessitated a lockdown at the global regional and national levels. There is no doubt that the fear of the COVID-19 pandemic with its resultant lockdown effects on the social environment may impact the psycho-social health or wellbeing of individuals, communities or societies, with variations on regional or country-specific geographic.

Studies in Mexico, Iran, China, Indonesia, Paraguay, Poland and twelve African countries including Nigeria identified reported depression as one of the psycho-social impacts of the COVID-19 pandemic<sup>14-20</sup>. In a Nigerian study, Fadipe *et al.* reported that nearly 28% of 160 patients admitted for COVID-19 reported depression who were on admission for COVID-19, findings showed that about 28% reported depression<sup>14</sup>. In China, about 47.9% prevalence was reported<sup>16</sup>. In Mexico,

Mckune *et al.* found an association between the psycho-social health of school children and COVID-19<sup>21</sup>. The reported depression due to COVID-19 affects school performance. Contrastingly, the elderly were mostly hit with depression in Poland<sup>19</sup>. Anxiety was evident in Mexico, Iran, China, Indonesia, Paraguay, Poland, Cameroon, Egypt, Mali, Morocco, Nigeria, RDC, Rwanda, South Africa, Togo, and Tunisia<sup>14,15,17,18,20-26</sup>.

Insomnia (sleeping disorders) was identified mainly in China and Libya though, systematic reviews across described other African countries including Cameroon, Egypt, Mali, Morocco, Nigeria, RDC, Rwanda, South Africa, Togo, and Tunisia<sup>20,25,27-29</sup>. Insomnia was primarily due to a lack of trust in local and national governments to contain the COVI-19 pandemic. Evidence indicated that prevailing insomnia resulted in depression and the truncation of the sleeping pattern of individuals, especially young females and it affected social behaviour of people. Du *et al.* reported a prevalence of 20.3% of insomnia in China, while Chen *et al.* reported a truncation of sleeping patterns among healthcare workers in selected African countries<sup>20,25</sup>.

Fear was reported in thirteen (13) countries including Zimbabwe, Nigeria, Bangladesh, Colombia, the Democratic Republic of the Congo (DRC), Jordan, Lebanon, South Sudan, China, Uganda, Pakistan, and Ethiopia<sup>25,30-37</sup>. In Columbia, a study conducted among children reported worries and concerns about how to cope with education due to insecurity and distortions due to COVID-19. In other instances, the leading causes of fear were due to what society may say if one contracts COVID-19, fear of spreading the infection to family members and fear of quarantine and follow-up services. In Pakistan, frontline health workers, especially doctors expressed fear due to constant interface with COVID-19 clients and reports about frontline workers dying of COVID-19.

Few studies that reported suicidal tendencies, frustration, psychosomatic disorders, aggression, obsessive-compulsive symptoms,

helplessness, irritability, and denial were mainly identified in a single country. For example, suicidal tendencies were only reported in Nigeria with a prevalence of 4%<sup>14</sup>. Also, findings in China and India showed some levels of frustration due to do COVID-19 pandemic<sup>32,38</sup>. A study conducted in India among adults with chronic conditions found that COVID-19 triggered frustrations due inability to access their drugs due to movement restrictions. In China, the reported frustration was mainly from loss of jobs of individuals and families due to lockdown restrictions and aggression<sup>39</sup>. In Mexico, the obsessive-compulsive symptom was reported<sup>21</sup>. Also, in China, there was a lot of uncertainty about COVID-19 diagnosis and treatment access which resulted in confusion<sup>25,26</sup>.

In Nigeria, Loneliness was reported in communities, leading to idleness among residents, whereas, in Poland, the elderly was most affected by loneliness<sup>19,23,37</sup>. Another psycho-social impact of COVID-19 reviewed by literature was worry and this was reported in Lebanon, Iran and China<sup>32,40,41</sup>. In Lebanon, the reported worry was mainly among young girls due to concerns about getting COVID-19. In China, Li *et al.* found that inpatients were worried about how to combine treatment of COVID-19 with comorbidities<sup>32</sup>. COVID-19 pandemic triggered post-traumatic stress disorder arising from follow-up and resultant social and economic effects in China, Uganda and Lebanon<sup>32,34,42</sup>.

Both self and social stigma and discrimination were evident in China, Malaysia, Palestine and Uganda. Self-stigmatization expressed as guilt about the potential transmission of the virus to families was mainly reported among inpatients. Also, literature found incidences of social stigma following the discharge of patients from the hospital. In China, available evidence suggests that Wuhan residents were socially bullied on social media while attributing COVID-19 to the cultural practices including nutritional habits and festivals of the country. Also, social stigma was reported among Malaysian inpatients and their families<sup>25,32,43-45</sup>.

Despite social behavioural change, communication, interventions since 2020 and to the best of our knowledge, there are no specific studies highlighting the range of typologies/dimensions of psycho-social impacts that individuals and households were exposed to during the deadly viral infection specifically in developing countries. The world has witnessed yet another series of waves at different times in different countries and COVID-19 is undoubtedly, one of the diseases of the world. It is imperative therefore, that lessons from the pandemic are shared and integrated into the systems (school, health services, economy and social life) to mitigate against the impacts.

This article examined typologies of psycho-social impacts due to the COVID-19 pandemic through views, reports and experiences from developing countries. The findings from this research will be used to design psycho-social support interventions for individuals and households most affected by COVID-19 and other related pandemics in developing countries. The findings on the typologies of the psycho-social impacts will enhance the knowledge of scholars and readers in preparing for future pandemics.

Although the United Nations determines which countries are among the least developed countries, it has not itself adopted criteria for developing countries. Nevertheless, the "Human Development Index" has been consistently used as a framework for conditions of daily life such as nutrition, medical care, education and income comparable index.

## METHODS

### Research design

This study was a scoping review of the related literature conducted using search engines such as Google, Google Scholar, Research Gates, PubMed, Firefox And Morxila as well as high-impact journals including BMC series, BMJ series, Journal of Health Psychology, Frontiers, World Health Organization databases, Science Direct, Global Health Science and Practice Journal, Europe PMC, Jstor, and grey literature such as

national dailies. Keywords used in the search include global pandemic, pandemic, COVID-19, psycho-social impacts of the pandemic, psychological effects of COVID-19, developing countries, human gains and losses due to COVID-19, and global impacts of COVID-19.

### **Inclusion and exclusion criteria**

Inclusion and exclusion criteria .A structured search for systematic reviews concerning COVID-19 was performed using the search sites as stated above. Data that were published between October 2019 and August 2022 were included in the review. The quality of each review was assessed using the Assessment of Multiple Systematic Reviews 2 (AMSTAR 2) checklist and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist.

Articles that were cited by others were retrieved and reviewed. To ensure a strict focus on developing countries, the research team obtained the list of developing countries as described by the United Nations (<https://www.worlddata.info/developing-countries.php>) which includes about 152 countries in the world.

. A total of 1,236 articles that discussed COVID-19 were retrieved, out of which 1,197 were excluded either because the studies were conducted in developed countries which was not the focus, or they did not highlight the typologies of psycho-social impacts due to COVID-19, or they were systematic reviews from the global perspective (both developed and developing countries). After due scanning and review, 39 articles met the inclusion criteria, focusing on psycho-social impact studies that were conducted in developing countries. Out of the 39 articles included and reviewed, 11(28.2%) were qualitative studies, 1(2.3%) was a systematic review, 2(64.1%) were quantitative studies, while 2(5.1%) were stories published in the national dailies.

## **RESULTS & DISCUSSION**

COVID-19 pandemic accompanied by a partial or total lockdown instigated psycho-social disorders across 31 developing countries including Libya, China, Nigeria, Mexico, Iran, Indonesia, Paraguay, Poland, Ghana, India, Zimbabwe, Bangladesh, Colombia, the Democratic Republic of the Congo (DRC), Jordan, Lebanon, South Sudan, Lebanon, Palestine, Pakistan, Malaysia, Poland, Ethiopia, Cameroun, Egypt, Mali, Morocco, Rwanda, South Africa, Togo, and Tunisia. This study, however, highlights that more needs to be done to understand and quantify the burden of psycho-social disorders in developing countries as there is still a dearth of evidence in other countries outside China.

About 17 typologies/dimensions of psycho-social disorder due to COVID-19 pandemic were identified in developing countries including Nigeria. These typologies include sleeping problems, depression, anxiety, suicidal tendencies, frustration, psychosomatic disorders, loneliness, obsessive-compulsive symptoms, fear, worry, aggression, post-traumatic stress disorder, confusion, stigmatization and discrimination, helplessness, irritability and denial. While some of the articles were specific about the type of psycho-social impacts documented, several others did not. Differences however existed in the occurrence of the psycho-social impacts across the 31 countries identified. For example, while only one typology/dimension of psycho-social impact was observed, multiple effects were observed in other. China was however worst hit with psycho-social disorders arising from COVID-19<sup>12,20,24,26,32,39,43</sup>.

Some of the lessons highlight the importance of integrating psycho-social support and defence mechanisms in schools, the workplace and social life. Finding imply that COVID-19 can expose individuals and households to social vulnerability like insecurity, cause school drop-out and threats to occupation, especially within the health workforce.

## **CONCLUSION**

COVID-19 is a global problem that came as a shock to the entire world. Many protocols were reeled out to prevent the continuous spread

of the pandemic. The protocols and the pandemic itself came with enormous psycho-social problems, many of which have been reviewed in this piece. COVID-19 caused a lot of psycho-social consequences or disorders among individuals and households.

### Recommendations

i. Governments should integrate psycho-social support interventions in the COVID-19 health packages.

ii. There is need for continuous mass education on COVID-19 as a treatable and not a death sentence. Individuals must be made to understand where and how they can access the services.

iii. Further research need to be conducted to quantify the burden of psycho-social disorders due to COVID-19 across the countries for informed decision-making and for the improved health services delivery.

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**Authors Contribution:**

NS conceived of the study, initiated its design, participated in data analysis and coordination and drafted the final manuscript. AIT, MAA, MS participated in data analysis and coordination and reviewed the final manuscript.

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**Table 1: Chronology of articles**

Typology of Psycho-social impact	No of published evidence reporting psycho-social impact	Type of Study
Sleep problems	6	A quantitative and systematic review
Depression	8	Quantitative
Anxiety	12	Quantitative
Suicidal tendencies	1	Quantitative
Frustration	3	Quantitative
Psychosomatic disorder	1	Mixed method
Fear	16	Quantitative and Qualitative
Loneliness/idleness	4	Quantitative
Worry	3	Quantitative
Obsessive-compulsive symptoms	1	Quantitative
Aggression	1	National survey
Post-traumatic stress disorder	4	Quantitative and Qualitative
Confusion	2	Qualitative and Quantitative
Stigmatization and discrimination	5	Qualitative
Helplessness	1	Qualitative
Irritability	1	Qualitative
Denial	1	Qualitative