Commentary

Typhoons During the COVID-19 Pandemic in the Philippines: Impact of a Double Crises on Mental Health

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Abstract

The Philippines, a disaster-prone country in Asia, was hit by 22 tropical cyclones during the coronavirus disease (COVID-19) pandemic. Among the 22 tropical cyclones, 1 is recorded as the strongest tropical cyclone that made a landfall in world history. The recurrent typhoons in the Philippines during the pandemic have led to a long-lasting humanitarian crisis as hundreds of thousands of houses and collateral assets have been destroyed due to floods and landslides, leaving thousands of Filipinos homeless. Concurrently, the country has been experiencing a rise in the number of COVID-19 cases due to overcrowding in evacuation centers and lack of social distancing. The simultaneous existence of natural disasters and pandemic has caused devastating and detrimental effects to the mental health of Filipinos. Nonetheless, the Government of the Philippines, together with the World Health Organization and other humanitarian organizations, has been working hand-in-hand in implementing mental health approaches and providing psychological interventions to Filipinos who were greatly affected by the natural disasters and the COVID-19 pandemic.

Introduction

The Philippines, a Southeast Asian archipelagic country with 7641 islands,[1] has experienced a vast number of deadly disasters, such as recurrent typhoons, earthquakes, floods, storm surges, volcanic eruptions, and other natural disasters.[2,3] This is the reason why it was dubbed the third most disaster-prone country in the world, behind Tonga and Vanuatu.[3–5] Annually, an average of 20 typhoons hit the country, 5 of which are devastating.[6,7]

More than 100 million residents are exposed to an extensive variety of natural disasters due to 4 main factors.[8,9] First and foremost is the country's geographical location on the Pacific's earthquake and volcano Ring of Fire, making it very susceptible to natural disasters.[7,9] Second factor is its warm ocean waters with a temperature of above 28°C, which may trigger typhoons to form.[9–11] Located just above the equator in the Western Pacific, the country is surrounded by the warmest ocean temperatures in the globe.[7,9] Third factor is the country's deforestation problem which triggers mudslides and flash floods.[9,12] The last factor is the country's social vulnerability. Many poor Filipinos who live on low-lying coastal islands are most vulnerable to disasters.[9,13,14]

In 2020, the Philippines was hit by a total of 22 tropical cyclones in the middle of a pandemic.[7] Among the 22 tropical cyclones, there were 5 tropical depressions, 7 tropical storms, 3 severe tropical storms, 6 typhoons, and 1 super typhoon.[7] On May 14, 2020, when the coronavirus disease (COVID-19) pandemic had already resulted in 11 876 cases in the country, the first tropical cyclone for the year, Typhoon Vongfong (locally known as *Typhoon Ambo*), hit the Philippines and devastated areas of the country's east coast.[15,16] In less than 12 hours, it transformed from a strong tropical storm to a Category 3 typhoon, with heavy rains and winds of 96 mph that caused floods, landslides, power cuts, knocked down trees, countless roofs, in addition to damaging homes and infrastructure in the region, leaving thousands of people homeless, because they lived in areas at risk.[16]

Six months after the first tropical cyclone in 2020 landed in the country, the Philippines was struck by Super Typhoon Goni (locally known as *Super Typhoon Rolly*), the strongest tropical cyclone in world history, with rains and winds of 195 mph, on November 1, 2020.[17] Twelve regions in the Philippines, with a total population of 68.6 million, were reported to be affected by the Category 5 super typhoon.[18–20] Among the 12 regions, the Bicol region, specifically the provinces of Catanduanes and Albay, was greatly devastated.[18]

The effects of this climatic disturbance were devastating and enhanced due to the current pandemic. During the landfall of Typhoon Vongfong, around 61 000 families were assigned to 2332 shelters in the Bicol region, and 13 000 people were evacuated in the Samar region,[21] while during the landfall of Super Typhoon Goni, around 400 000 individuals were displaced in the Bicol region.[22] Repetitive typhoons in the Philippines during the pandemic have laid the bricks for an everlasting humanitarian crisis as more than 305 000 houses and collateral assets have been damaged or destroyed.[23] Therefore, the scenarios facing the typhoon passage demanded immediate evacuation; however, due to isolation and social distancing, these actions were hindered.[16] Authorities tried to avoid agglomerations as much as possible at evacuation sites to ensure compliance with measures of social distance and hygiene, in addition to checking body temperature and the presence of symptoms of COVID-19. Other strategies included sending packages of food to municipalities that could suffer from a shortage of supplies.[15,21,24]

In many instances, natural disasters can cause physical, mental, and social health problems, wherein poor mental health is more frequently reported.[25] However, when natural disasters are added to an ongoing pandemic, this combined situation may overwhelm and devastate many individuals, leading to poorer mental health. Thus, this article aims to address the effects of natural disasters on the mental health of Filipinos during the COVID-19 pandemic.

Discussion

As the Philippines is known to be hit by at least 20 typhoons every year,[7] delayed mental health effects have been noticed more often than immediate effects. The worst typhoon in the Philippines' natural disaster history recorded before the recent Super Typhoon Goni was Super Typhoon Haiyan (locally known as *Super Typhoon Yolanda*) that hit in November 2013.[17,26] Studies reported that the mental health of Filipinos after Super Typhoon Haiyan has reasoned out the delay in manifestations of mental instability. At the time of disaster, surviving the worst and escaping the worst occupy the victims. Post-rescue, when a safe space is reached, which is after a period of 3 to 6 months, is when the mental component enters. Posttraumatic stress disorder (PTSD), depression, and anxiety were reported after Super Typhoon Haiyan, and the same could be expected now.[27]

With the added pandemic, adjustment problems and irrational fears, shock, and hopelessness are worse this time, compared with previous disasters in the Philippines. A constant state of despair is also seen in the victims, which is stirring the mental health of the population. The burden of losing a loved one and the effect of realizing it later, displacement of family, socio-economic loss, environmental loss, and lack of mental preparedness and social support with negative coping skills, such as substance abuse, may induce psychological stress.[25] One important cause of this is the non-availability of medications for people who were already on drugs for pre-existing mental health problems, which aggravates their condition.[27]

Moreover, the effect of pandemics on mental health has also been studied frequently during the COVID-19 pandemic. It was stated in a study conducted within the early portion of 2020 that a minimum of 3.6 million Filipinos suffer from a type of mental, neurological, and substance use disorder.[28] Thus, one can conclude that the COVID-19 pandemic has had a very detrimental effect on mental health, leading to depression, anxiety, severe stress, and high suicidal tendencies in the general population all over the world.[29,30]

In the Philippines, many studies were conducted to assess the correlation between the pandemic and mental health of Filipinos. One study concluded that around 17% have moderate-to-severe depressive symptoms, whereas around 30% reported to have moderate-to-severe anxiety levels, and around 14% had moderate-to-severe stress levels.[31] Cases for mental health conditions, especially depression, anxiety, and severe stress significantly spiked up. A rise in suicide rates, increased by 25.7% in 2020, was a major concern.[32] Although the Philippines has consistently ranked in the top 5 of a worldwide optimism index, the National Center for Mental Health (NCMH) has revealed a huge rise in monthly hotline calls about depression, with numbers increasing from just 80 calls before lockdown to about 400.[33]

Many factors having an adverse effect on mental health during the pandemic were identified, which include younger than age 30, female gender, well-educated, unmarried or separated, prolonged home stay, excessive worries about COVID-19, and association with people who have already contracted the disease. Protective factors, on the other hand, included male gender, staying within a joint family especially with children, having confidence in one's own ability to make it through the pandemic as well as one's health care professionals, having employment, and hand hygiene.[31,34]

Since the passing of the country's Mental Health Act, the comprehensive and integrated approach has been practiced.[35] To incorporate community involvement and provide a holistic approach, 3 main ideas have been highlighted, such as incorporation of culture in intervention program by ensuring audience appropriate language usage for the material and methodology used, participatory approaches by implying the utilization of community for both the delivery as well as the reception of the intervention, and evolving role of competent community psychologists who will empower the community by understanding and managing the stakeholders.[35] The importance of community-based intervention is felt since mental health is still stigmatized in the Philippines. Thus, involving the community in designing, delivering, and training would be a more agreeable approach.

Realizing this, the government of the Philippines introduced a multi-sectoral approach for mental health in a variety of settings, such as in offices, colleges, schools, and hospitals.[36] These include National Suicide Prevention Strategy, NCMH's 24/7 hotline, and World Suicide Prevention Day to raise awareness. Collaborating with the government, the World Health Organization urges Filipinos to have conversations about mental health and highlights the need for empathy by listening to those affected.[33] Moreover, US $12 billion will be allocated to the purchase and distribution of COVID-19 vaccines in developing countries, including the Philippines, by the World Bank Group.[37] The Office of Civil Defense and the National Disaster Risk Reduction and Management Council are also working to build preparedness within residents by encouraging sanitation and social distancing during the disaster to help improve safety within temporary shelters.[38]

At the communal level, local initiatives are working to address mental health needs of the general population through training programs and requests to build more mental health facilities. A scarcity of well-trained psychiatrists exists in communal settings, which allows locals to find alternatives to training workers in identifying and managing mental health concerns, especially trauma.[39] One such example is the initiative by the regional office of the Department of Health (DOH) in Bicol which aims to train workers in rural and city areas to manage mental health concerns within their communities. The DOH has also requested the local

government units to increase mental health institutes like Don Susano Rodriguez Memorial Mental Hospital in Pili as such institutes are few in number in the region and in the country.[40] In addition, the local government units in Bicol, with the assistance of the Department of Education, conducted therapeutic sessions on psychological well-being and mental support programs to assist the locals in recovering from trauma and anxiety caused by the recurrent catastrophic typhoons and current pandemic.[41] Teachers were also identified as key players in addressing mental health issues of children and hence initiatives to provide psychological first aid training to them are helping address their mental health needs.[39]

Other suggestions include the use of telemedicine to help navigate the burden of mental health issues, and implementation of disaster risk reduction management and psychological interventions to Filipinos who were greatly affected by both natural disasters and the COVID-19 pandemic.[42,43] Psychological interventions include coping strategies, psychological first aid, debriefing, cognitive behavioral therapy, psychosocial support, and community-based interventions.[44,45] In addition, it is necessary that primary health care services, which constitute the most frequent contact of a greater part of the population, integrate aspects of mental health care, with a focus on previous diagnosis, prevention, and treatment of mental disorders in the community, as well as in the development of educational and awareness campaigns on the topic. Such integration is also necessary, because during the pandemic and in situations of public emergency, such services are the main form of care for patients with psychiatric diseases, due to the difficulty of accessing some services. In this scenario, more substantial financing by the government is also needed, with the objective of expanding and giving greater autonomy to primary care services, through the training of professionals to work in the initial management of mental disorders. Strategies like these can assist not only in the treatment of pre-existing mental illnesses, but also in reducing the incidence of new psychiatric disorders.

Conclusion

To conclude, the Philippines is undergoing a humanitarian crisis amidst a pandemic, which is causing detrimental impacts on the mental health of Filipinos. The Philippines experienced many natural disasters during the pandemic primarily due to its geographical location and warm ocean temperatures. Typhoons in 2020 had devastating infrastructural impacts on an already poverty-stricken country, with the addition of a growing COVID-19 pandemic. Loss of basic amenities, homelessness, financial stress, and lack of social distancing in evacuation centers were prevailing factors to mental instability. Among the psychological impacts, depression, anxiety, and PTSD were increasing within a population that already had high mental health problems. Nonetheless, international agencies and the government are making efforts to recover through the creation of economic opportunities, provision of COVID-19 vaccines, and mental health support services.

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