

SHORT COMMUNICATION

Psychological and Behavioral Implications of the pandemics: Strengthening the mental health component in the existing health system

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ABSTRACT

The emergence of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS Cov2) outbreak has caused unprecedented loss of lives and substantial morbidities all across the world. The rapid spread of the disease prompted many governments to take several drastic steps to contain the virus. These steps not only affected the overall dynamics of the countries and the entire world but also had a huge impact on the mental health of the population. Given the long-lasting effect on the mental health of the population and its massive impact on the economic growth and development of the country, there is a need to strengthen the mental health component in the existing health system. This will lead to better productivity and faster economic growth of the nation.

Keywords: Psychological impact of pandemic, mental health, behavior change during pandemic, depression, anxiety

Introduction

In December 2019, it started with reporting a cluster of pneumonia-like illnesses in the province of Hubei, China. Given the fast dissemination of cases and deadly consequences, it was swiftly discovered that the causative agent for the disease was SARS-CoV 2. Subsequently, the illness was named after its causative agent as corona virus disease 2019 (COVID-19)^{1,2}. The existing health systems of many countries were not able to handle the skyrocketing incidence rate of the disease and substantial mortality. This led the healthcare policymakers and the government to make various audacious decisions like establishing quarantine facilities, stay-home orders, shutting down local public transport, absolute lock downs, closure of public parks and places, etc^{3,4}. Although these decisions are for containment of the virus in a localized area and tracing the reported cases of COVID-19 in those areas, the community was not prepared for such an unprecedented condition of self-isolation. The steps were taken to break the chain of transmission of the virus. Therefore, the infectious consequences were primarily targeted while making such decisions. However, the effect on the mental health of the community was by and large undermined by them.

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The stagnation of the community in one place affected their economic condition. It also had a huge negative impact on their psychology. This impact was exponentially multiplied when people witnessed the deaths of their peers. To cope with such a situation, certain behavioral changes have also been observed amongst the community⁵. These behavioural changes still exist in the community even after WHO declared that COVID-19 is now an established and ongoing health issue but no longer constitutes a public health emergency of international concern (PHEIC) in May 2023⁶. This exemplifies the impact of health emergencies on individual behavior which sustains in the long run.

COVID-19 not only negatively impacted the different community groups, but it also adversely affected the health system in almost all countries. COVID-19 cases were mounting in the health facilities. Limited healthcare providers were performing their duties keeping their lives at stake. There were several operational challenges like the limited availability of essential medicines, and protective gear like PPE kits, masks, gloves, oxygen cylinders, etc. Community healthcare workers were also facing similar challenges while performing their field duties.

WHO estimates that the burden of mental health problems in India is 2443 disability-adjusted life years (DALYs) per 100 00 population; the age-adjusted suicide rate per 100,000 population is 21.1. The economic loss due to mental health conditions, between 2012-2030, is estimated at USD 1.03 trillion⁷. Recognizing the need for good quality, scientific and reliable information for strengthening mental health policies and programmes, the Government of India entrusted National Institute of Mental Health and Neurosciences (NIMHANS), with planning and conducting the National Mental Health Survey (NMHS). NMHS 1, conducted in 2015-16 in 12 states^{8,9}. Phase 2 survey is intended to estimate the prevalence of mental morbidities, its determinants, resources for its management, etc.

This study aims to document the effect of the pandemic on the psychology and behavior of the healthcare workers especially healthcare workers and also to draw the attention of policymakers toward the criticality of strengthening the mental health component of the existing health system.

Methodology

The present study adopted a qualitative research study design. The research protocol for this inquiry was approved by the Institutional Ethical Committee.

In-depth qualitative interviews were carried out with community members and healthcare workers especially those working in the fields. These workers include community health officers, Accredited Social Health Activist (ASHA), and Auxiliary Nursing Midwives (ANMs). A validated In-Depth-Interview Guide guided the interviews.

Thematic analysis was carried out on the interview transcripts. A professional transcription service by Sound type AI app (sound type.ai) was used to transcribe verbatim and translate the audio recordings into English. All interviewees were invited to review the transcripts. None of them provided any feedback. Subsequently, the transcripts were transferred to the NVivo (Version 12) qualitative analysis software program (QSR International Pvt Ltd. 2018) for data analysis.

Fifty-three participated in the interviews whose mean age was 35.5 years (ranging from 22 years to 74 years). Around one-fourth of the sample (15/53) were community health workers while (17/53) belonged to miscellaneous occupations ranging from freelance labourer, carpenter, stenographer, etc.

Results

Seven major themes were identified through thematic analyses of the 53 interviews associated with the psychological and behavioral effects of the pandemic. These themes are-

- (i) Psychological effect of the pandemic;
- (ii) Behavioral change of the pandemic;
- (iii) Availability of food during the pandemic;
- (iv) The effect of the pandemic on children’s education;
- (v) Employment status during the pandemic;
- (vi) Effect of pandemic on financial management of family
- (vii) Effect of the pandemic on the social connectivity

Table -1: Socio-Demographic characteristics of the families (N=53)

Socio-demographic items		No.
Gender	Male	32
	Female	21
Age (in years)	21-30	4
	31-40	28
	41-50	12
	51-60	3
	>60	6
Occupation	Community Health Officer	1
	ASHA	10
	ANM	1
	AWW	3
	Shopkeepers	8
	Labors	12
	Homemakers	1
	Miscellaneous	17

. Socio-demographic characteristics of the fathers and their families are presented in Table 1.

The psychological effect of the Pandemic

Multitude effects on the psychology of the people was observed during the pandemic. They were ranging from loneliness to anxiety, depression, etc.

Anxiety: Occasional anxiety is a normal part of life¹⁰. However, people with anxiety disorders often experience fear and worry that is both intense and excessive. These feelings are typically accompanied by physical tension and other behavioral and cognitive symptoms. They are difficult to control, cause significant distress, and can last a long time if untreated¹¹. COVID-19 was a unique pandemic in two ways; firstly, it was not confined to healthcare facilities and secondly, it was associated with stigma and not just discrimination but complete isolation. The anxiety level was high among almost all the respondents’ especially healthcare providers because of these two features of COVID-19. There was a persistent fear of death. The fear used to get increased exponentially when a member in the family died because of COVID-19. Moreover, the fear was not just related to death but to a myriad set of speculations like children’s education, economic and social conditions.

The extent of fear was such that even if the community needed assistance from the frontline workers, they were not willing to communicate with them. Working till night in such a hostile environment with limited resources, leaving their families behind added anxiety among the healthcare workers.

Depression: Although healthcare workers had huge work pressure with innumerable operational challenges during the crisis, their families had depressing feelings because of stay-at-home orders. Stay at home was found depressing in almost all the respondents. Mobile phones and televisions were the only source of entertainment. However, these sources were also the medium of rumors and false information. This added to the depression in the family

members. Many were bound to close their small businesses and entrepreneurs because of plummeting demands and difficult supply.

The effect of the pandemic on Children Education: Schools and colleges were shut down during the pandemic crisis. Gradually, the institutions developed a new strategy to conduct online classes and exams for their students. This led to increased screen time of the children and poor cognitive ability. Many of them lacked smartphones, so they had to borrow or buy the smartphones on an urgent basis.

To illustrate the situation, one of the community health officers became emotional when she described how she kept her two children in a locked room while performing her duties. Her husband was working in the border security forces and she was rearing her kids alone since they were born. During the crisis, her kids were completely isolated and locked in a room with intermittent food delivery. She seemed to be clueless about their education during that time because life of kids was more important than their education. She just provided one smartphone to them for attending their online classes.

Increased screen time has become a prominent behavior change since the pandemic. Not just children but the institutions also developed WhatsApp, Instagram, Youtube, etc as more convenient mode of communication and an efficient component of pedagogy.

Availability of food during the pandemic: Most of the respondents mentioned the struggle for food. Few of them said that they borrowed money from others to arrange for even chapattis (rotis) for their families.

However, few received foodgrains from both public distribution system and Prime Minister Garib Kalyan Anna Yojana (PM-GKAY). Government of India is claiming to distribute the 19.76 LMT foodgrains to beneficiaries so far in States/UTs under Phase-V of Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) till 12th Jan 2022¹².

Employment status during the pandemic: Healthcare workers were overburdened with their work and few of them reported to work till 10-11 pm. However, many of the respondents were sitting idle at home because they lost their jobs during the pandemic. A factory worker among the respondents said that she had to sit at home without any earnings because the factory was closed for a few months. Many of the respondents were bound to do some other tasks on a daily wager basis after leaving their jobs. One of the respondents said that their son had to borrow money from his employer but he is still working to pay that debt.

Effect of the pandemic on the financial management of family: Few respondents mentioned that they could manage to arrange their daily needs because they had saved some money. However, many had to borrow money from their relatives/ friends.

Effect of the pandemic on social connectivity: Almost all the respondents were disconnected physically from their social contacts. Some of them mentioned their unwillingness to talk to their relatives even on phone because of fear of some unfortunate news. However, social connectivity of a few of them was not affected during the crisis.

Behavioral Change during the pandemic: Few people were religiously following certain routines of steam inhalation and gargling daily. Hand-washing practices after touching anything from outside became a habit for almost everyone. Bathing after coming from outside was also a practice at that time. Not just education but trading also opted for the online platform because of a change in consumer's attitude¹³. The rise of inclination towards E-commerce since the onset of COVID-19 is also a significant behavior change in the population.

With the increased utilization of online platforms in various sectors, the Government of India is now focussing on harnessing digital tools in the healthcare sector as well. However, given the long-lasting effect of the pandemic on the mental health of the population and in turn its massive impact on the economic growth and development of the country. In many developed countries, 35% to 45% of absenteeism from work is due to mental health problems. There is a dire need to strengthen the mental health component in the existing health system. Mental health has many determinants and social factors have profound effects on it. Therefore, interventions related to mental health need to be started since childhood from the home itself.

The undermining of the significance of mental health can be assessed by the fact that more than 40% of all countries worldwide have no mental health policy and over 30% have no mental health program. Over 90% of countries have no mental health policy that includes children and adolescents¹⁴. Focus on mental health becomes even more important after pandemic because people now have unforgettable memories of deaths of their loved ones. There is an urgent call to strengthen the mental health component of the existing health system. However, it should be implemented holistically involving the entire community.

WHO also recommends interventions from foetal stage of the child. Commencing with adequate care during pregnancy and childbirth, school health programs, training of parents, food fortification, etc up to the provision of counseling and essential medicine in the primary health care center and modernization of human rights. Every single step counts to prevent mental illness in the community. The cumulative effort to promote mental health not only has a profound impact on the productivity and economic growth of the nation but also prepares the community to face any natural and biological disaster in the future.

References

1. <https://pubmed.ncbi.nlm.nih.gov/32007145/>
2. <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2020.566212/full>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7451060/>
4. JMIR Mental Health - Flattening the Mental Health Curve: COVID-19 Stay-at-Home Orders Are Associated With Alterations in Mental Health Search Behaviour in the United States
5. <https://www.mecs-press.org/ijeme/ijeme-v10-n5/IJEME-V10-N5-5.pdf>
6. <https://news.un.org/en/story/2023/05/1136367>
7. <https://www.who.int/india/health-topics/mental-health>
8. <https://pubmed.ncbi.nlm.nih.gov/32126902/>
9. <https://indianmhs.nimhans.ac.in/>
10. <https://www.nimh.nih.gov/health/topics/anxiety-disorders#text=What%20is%20anxiety?,and%20various%20phobia%2Drelated%20disorders>.
11. <https://www.who.int/news-room/fact-sheets/detail/anxiety-disorders>
12. <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1789376>
13. <https://www.tandfonline.com/doi/full/10.1080/08961530.2020.1771646>
14. <https://iris.who.int/bitstream/handle/10665/42823/9241562579.pdf>

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