Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Crossing barriers: Role of a tele-outreach program addressing psychosocial needs in the midst of COVID-19 pandemic

Swati Ravindran, Lakshmi Nirisha P, Channaveerachari Naveen Kumar, Shekhar P Seshadri, Kasi Sekar, Sanjeev Kumar Manikappa, Anish V. Cherian, Palanimuthu T Sivakumar, Paulomi Sudhir, Radhakrishnan Govindan, Bhasker Reddy P, Allen Daniel Christopher, Sobin George

ARTICLE INFO

Keywords:
COVID-19
Psychological First Aid
India
Telephonic Helpline
Biological Disaster

ABSTRACT

Novel Coronavirus disease 19 (COVID 19) pandemic has affected more than 2 million individuals and causing over 0.1 million deaths worldwide. In India, the pandemic has gained momentum in the last few weeks with over 10,000 cases and 400 deaths. In the absence of any pharmacological cure on the horizon, countries have resorted to the use of strict public health measures to curtail spread of further infection to fight the coronavirus. The pandemic and its social implications have triggered mental health concerns among the masses. Providing psychological first aid and psychosocial support is vital in mitigating the distress and enhance the coping strategies of people to deal with this biological disaster. Tele-mental health services play an important role in this regard. In this article we describe our preliminary experience in understanding the psychological concerns of general public and addressing them by providing psychological support through a national telephonic helpline.

1. Introduction

Novel Corona Virus disease – 19 (COVID-19) pandemic has changed the world-view on biological disasters. Countries across the world are grappling with the consequences of this disaster ranging from physical, social and psychological issues. It has been 3 months since the COVID 19 has spread across the globe. Since the first case, reported in the Hubei province of Wuhan, China, there has been an exponential rise in cases daily, the number currently crossing a staggering 2 million cases worldwide. COVID-19 mainly comprises of a respiratory syndrome that starts with mild flu-like symptoms that may progress onto severe respiratory distress and death. The pandemic has resulted in over one lakh deaths worldwide. With no vaccine available currently and only symptomatic treatment options available, most countries have resorted to non-pharmacological interventions such as quarantining suspected individuals who have the likelihood of being exposed to the infection, strict social distancing methods through total lockdown of cities; along with emphasis on personal hygiene through regular hand washing, use of face mask have been propagated to curtail the spread of this virus. In India, the whole country is in a state of lockdown for more than 4 weeks now. The risk of acquiring the infection, dread of its spread, quarantine of suspected individuals (Brooks et al., 2020), social distancing and a drastic change in routine for individuals all over the world has led to a wave of mental health concerns (Venkatesh and Edirappuli, 2020). Information though is available in large volumes but with uncertainty to it, brings about anxiety and fear, therefore there is a need for imparting knowledge and publishing data that is accurate which should be able to guide researchers, policy makers and general public alike to deal with...
this COVID 19 pandemic crisis (Tandon, 2020a, b). People have been experiencing a range of psychiatric manifestations ranging from anxiety panic symptoms, hyper-vigilance, disturbed sleep and appetite. During these deeply troubling times, harnessing technology is one way of cutting across barriers to reach out to distressed individuals. COVID 19 pandemic has contributed for increased use of technology as well as the exploration of various innovative ways to reach to individuals in need (Dong and Bouey, 2020; Galea et al., 2020). In the time of this pandemic the potential use of technology enabled mental health services are coming into forefront not just for adult population but also for children and adolescents Golberstein et al. (2020) as well as for older adults. Telemedicine thus is emerging as the new ‘norm’ globally. The National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, a central and state funded tertiary care neuropsychiatric institute of South India is at the forefront of fighting this menace through several initiatives. One such initiative is the National Helpline for Psychosocial Support and Mental Health Services started on behalf of the Ministry of Health and Family Welfare (MOHFW), Govt. of India, and now involving several mental health institutions and state and district mental health programs throughout the country. In this article, we describe our preliminary experience in providing psychosocial support amid the COVID-19 pandemic from a Tertiary Care Centre in India (Fig. 1).

2. Materials and Methods

2.1. Need for establishing a crisis helpline for Providing Psychosocial Support and Mental Health Services in COVID-19 Pandemic

From the experience of previous biological disasters such as H1N1 Influenza (Swine Flu), Middle Eastern Respiratory Syndrome (MERS), it is known that uncertainties about the illness leads to confusion and anxiety amongst individuals and may also lead to certain high-risk behavior in the form of increased substance abuse, refusal to comply with public advisories, and increase in demand for mental health services (Gaygısız et al., 2012; Jeong et al., 2016). The World Health Organization (WHO) defines psychosocial support intervention as follows: “It is an intervention using primarily psychological or social methods for the substantial reduction of psychosocial distress (Bordoloi & Khoja, 2006).” The WHO has delineated the use of strategies such as counseling, exploring familial support, psychoeducational approaches and lastly, rehabilitative measures for provision of psychosocial support in disasters. In the aftermath of a biological disaster, it becomes more challenging for mental health professionals to deliver psychosocial first aid (PFA) to those in utmost need of it. COVID-19 poses unique challenges to provision of psychosocial needs to the population at large.

With respect to the COVID-19 pandemic, the challenges in reaching out to the target population and providing mental health interventions are as novel as the virus itself. Some of the barriers to in reaching out and providing psychosocial support to people in the time of this pandemic are:

![Fig. 1. Structural Organization of COVID 19 Psychosocial Support And Mental Health Services – Telephonic Helpline.](image-url)
● Direct contact is vital to offer any kind of support to the people in the community. With a high risk of transmission from direct contact and droplet transmission; scope for direct human interaction has become limited.
● To curtail the spread of the virus, global lockdown and social distancing protocols have been enforced. Suspected and confirmed cases face the added burden of stigma of suffering from a highly contagious illness and are forced to face their anxieties. This in itself is a source of mental health issues in this population.
● There is a dearth of trained mental health professionals to deal with the emerging mental health pandemic.

Addressing the need for health service requirements, addressing basic needs such as shelter, food/ clean water etc. is vital with the possibility of mental health concerns being placed on the back burner due to the rapid need to address the above concerns first.

2.2. Target Population for providing psychosocial support during COVID-19 pandemic

Given that biological disasters such as COVID-19 are likely to result in significant anxiety and uncertainty, specific groups might require attention of mental health professionals. The groups of individuals requiring attention can be broadly divided as shown in Table 1.

3. Results

3.1. Review of calls received by the COVID-19 Helpline for Psychosocial Support and Mental Health Services

In the first 2 weeks, the helpline received over 10,000 phone calls of which over 5000 were received by mental health professionals. Nearly 50% of the calls were not connected to mental health professionals possibly due to limited number of lines. Subsequent weeks Callers were classified depending on having logistical issues, psychological issues and those with medical issues. Irrespective of the reason for calling, all callers received psychological first aid and attempts were made to validate their distress, allowed ventilation and addressed their immediate concerns.

A preliminary review of the calls received on the helpline over the first one month revealed that though initially most of the distress calls were pertaining to anxiousness secondary to logistical concerns, travel restrictions and medical concerns with the country being in a state of lockdown. Over time predominant calls were related to the psychological issues such as panic, anxiety, depression, increase in substance use and substance withdrawal at syndromal or sub-syndromal levels.

Demographics documented through the IVRS system included the Gender and the concern for which they called. Most of the calls pertaining to psychosocial concerns were from men in comparison to women during the initial one month. In Table 2 we briefly put forth the initial review of the callers concerns in the calls that were answered in the first month after the helpline was initiated (Table 2.

Callers with psychological concerns comprised of:

● Those with concerns specific to COVID-19: Anxiousness due to their recent travel history, symptom cluster, those with fear of contracting COVID-19, with doubts about whether they required testing and needed further knowledge about testing options.
● Those who were burdened with additional responsibilities from taking care of an entire household during the lockdown, particularly women.
● Those caring for individuals with special needs, pre-existing chronic psychiatric / medical illnesses, the elderly.
● Children, who were anxious about upcoming/delayed competitive examinations and were worried about the future and parents/ caregivers worries about handling young children and home

Table 1
Groups of individuals who likely require psychosocial support for mental health issues during COVID 19 Pandemic

| Group 1: COVID 19 Suspected and Positive individuals and individuals in Quarantine |
|-----------------------------------------------------|
| This group deserves special attention, as they not only have been directly affected by the viral illness, they have to accept the diagnosis knowing its consequences and the implications of no cure being found yet. Additionally, these individuals are in isolation, and cannot seek comfort from their loved ones. Many may blame themselves for passing on the virus to a loved one, while still asymptomatic. It is prudent to take specific measures to address the mental health needs of these individuals. |

| Group 2 Bereaved family members |
|-----------------------------------------------------|
| Those who have lost members of their family to COVID-19 or its complications remain at greater risk, both from being suspected cases themselves and also from not being able to grieve and pay respects to their loved ones on their passing, since the virus is highly contagious |

| Group 3 General Public |
|-----------------------------------------------------|
| Comprises of the majority of the individuals which is the general public. Those who are neither confirmed/ suspected cases, but suddenly faced drastic changes in their daily routine and feel lost and anxious about the COVID-19 pandemic, about their personal and professional lives being compromised and general concern about what the future holds in store for them |

| Group 4 Special Groups |
|-----------------------------------------------------|
| Children and Adolescents, elderly individuals, pregnant women and women in the post-partum period, migrant laborers employees of unorganized sectors such as construction laborers, automobile drivers, other daily wage workers etc. |

| Group 5 Frontline COVID-19 Workers |
|-----------------------------------------------------|
| Front-line workers – which includes healthcare workers, policemen, security personnel and those involved in provision of essential services are not only at risk of acquiring the illness while on the line of duty, they also stand the risk of infecting their loved ones. Most front-line workers working in the COVID pandemic have self isolated themselves and this puts them at added risk of feeling stressed and anxious |

The target population in this service was Group 3 and Group 4: the general public.

Table 2
Demographic Characteristics of the population who called the COVID-19 PSSMHS Helpline in the First Month.

| S. No. | Calls received on the COVID-19 PSSMHS Helpline in the first month | Number of calls answered by frontline Mental Health Professionals |
|--------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1.     | For issues pertaining to children                             | 6991                                                          |
| 2.     | For issues pertaining to adults                               | 7639                                                          |
| 3.     | For issues pertaining to elderly                              | 2373                                                          |
| 4.     | For issues pertaining to women                                | 3288                                                          |
| 5.     | For issues pertaining to Healthcare workers                  | 184                                                           |
|        | Total Calls Answered by the Frontline Mental Health Professionals in the one month | 20,475 calls                                                  |

Note: The table includes only information for one month (April 2020) after the initiation of the service.

● Those who were on regular follow up from a psychiatric hospital, but had developed worsening of their existing psychiatric condition due to non-availability of medication.
• Those who were working on the frontline themselves, and were at constant risk of acquiring the illness.

Each of the above concerns were dealt by the volunteers and when there was a need for more intervention/advise, the calls were further forwarded to the senior level specialists from Psychiatry / Clinical Psychology, Psychiatric social work and Psychiatric Nursing.

Those who required psychiatric follow-up or emergency evaluation were directed to local psychiatric facilities. Several other centers and groups functioned through independent helplines which enabled volunteers to link the callers to local facilities. This is another advantage of helplines, which creates a network of resources and helps in linking the individuals to the local resources they need.

The helpline is not just a one-time contact and as and when needed callers were followed up to check if their issues have been resolved or are still persisting.

A preliminary feedback from the callers, done after 2 weeks of the service initiation revealed that over 90% callers were satisfied with the provision of the service. Callers reported that the mental health professionals were able to address their psychological distress, were able to help with linking to local resources, thereby addressing their concerns, and most of them reported that they would call back the helpline if in crisis. A few individuals however expressed discontent of this helpline service being unable to directly help in logistical concerns such as travel related and monetary concerns.

4. Discussion

4.1. Mental health issues in the COVID-19 Pandemic

Studies conducted in China recently revealed a higher prevalence of panic disorder, depression and other anxiety spectrum disorders following the COVID-19 pandemic. A study by Qiu et al. revealed that the prevalence of mental illnesses following COVID-19 was greater in persons between ages 18-30 years and in those above 60 years. They attributed this to younger individuals getting information from social media than from more reliable media sources. The illness has led to greater mortality amongst individuals >60 years of age and hence, this age group is more predisposed to experiencing psychological distress. It was also found that women were more predisposed to distress than males, and those with a higher education status were more at risk, due to more knowledge about the gravity of the situation (Qiu et al., 2020). Quarantine can in itself bring about psychological reactions varying from altruism to experiencing anxiety, depression (Brooks et al., 2020).

As a consequence of social distancing, during which many experience boredom, irritability and feelings of isolation. Whether experience of loneliness and isolation, is a consequence of social distancing or a reflection of the individuals coping ability in the current situation needs to be examined further.

4.2. Vulnerability Factors for the development of mental health issues following COVID-19 Pandemic

There are several factors that affect an individual’s predisposition to develop a psychiatric illness in the face of a biological disaster such as the COVID-19 pandemic. Some of these factors have been described in Table 3.

4.3. Providing Psychological First Aid through a Tele-Helpline in the COVID-19 Pandemic

Psychological First Aid(PFA) is one the most widely applied and accepted intervention in disaster management. PFA aims to provide comfort, listening to people affected in the disasters, provide protection and prevent future harm. Psychological First aid can be provided by anybody, it is not meant to be used by Mental health Professionals alone, but it is for any personnel who is part of a disaster management team (Shultz and Forbes, 2013; World health organisation, 2011).

In times of pandemic such as the current COVID-19 provision of PFA presents a unique challenge in itself. In this regard, the use of telephonic helplines, tele consultations/conferences helps in overcoming the physical barriers and enable reaching out to affected individuals in the community. Telephonic helplines/crisis hotlines have been used to address specific psychological issues such as suicide risk and substance use (Gilat and Shahar, 2007).

In the time of COVID-19 pandemic Tele-mental health comes into the forefront (Whaibeh et al., 2020) with multiple advantages

• Ensuring safety of both people in need and health care providers by decreasing the risk of exposure and transmission of COVID-19 infection
• Services can be provided to the people in need which may range from addressing psychological distress to prescribing psychotropics making mental health accessible and available to all.

Telephonic helplines enable mental health professional or a volunteer to provide PFA and assist in coping and adapting to the current crisis. The helpline also enables linking the individuals in need to the other useful resource. Ministry of Health and Family Welfare (MOHFW), Government of India keeping these issues in mind in collaboration with various Centers of excellence in Mental Health, across the country started a national helpline meant to address the Mental Health related concerns of the citizens during the COVID 19 pandemic lockdown.

The workforce who catered to the callers needs included psychiatrists, clinical psychologists, psychiatric social workers, psychiatric nurses, residents from the Department of Psychiatry and Trainees from other mental health specialties.

The helpline was a 24 × 7 service, the telephone call was facilitated through an Interactive Visual Response System, that helped callers understand the purpose of the helpline in their local language and helped them speak to a mental health professional based on their problem in order to help the caller.

The following principles of providing Psychological First Aid (PFA) were used as shown in Table 4.

The usefulness of the telephonic helpline intervention during this

| Table 3 | Vulnerable Factors predisposing to develop psychological distress. |
|---|---|
| Illness related Factors | Geographical location being close to COVID-19 hotspots, |
| Logistic Factors | severity of infection, lack of available cure at present, |
| | uncertainty about the pathogen, diagnosis and its treatment, |
| | course and outcome of the illness, fear of mortality |
| Individual Factors | Lack of availability of essential supplies and worry regarding |
| | procuring essentials during lockdown period, worry concerning |
| | lack of personal protective equipment, shortage of workforce |
| | working to control the infection spread and role of media in |
| | painting a grim picture. |

| Table 4 | Principles of PFA (World health organisation, 2011). |
|---|---|
| LOOK | Look out for individuals who seek help: The initiation of a helpline for provision of psychosocial support for COVID-19 was one step in this direction |
| LISTEN | Listen to their concerns: This was done through empathetic active listening and allowing ventilation. |
| LINK | Facilitate linking with available resources/Build support systems: The mental health professionals linked the callers with local psychiatrists, psychologists, distress helplines and govt resources |
time needs to be further evaluated and analyzed, in terms of satisfaction of the affected individuals with the service. Planning of more detailed modules to address specific issues is an important step in moving forward. The role of mental health professionals is going to become even important during the recovery phase of this pandemic and use of tele-services will continue to play a major role to reach out to the masses in all phases of this biological disaster.

4.4. Challenges faced and efforts made to overcome them while providing Psychological First Aid via COVID-19 PSSMHS Helpline

With any pioneering initiative comes its own set of unique challenges that require working through, with passing time. Some of the challenges faced by mental health professionals while working as front-line mental health workers and how it was attempted to overcome them included:

- Being unable to see a distressed individual face-to-face as it is in an usual psychiatric practice, was challenging as mental health professionals were unable to gauge facial expressions, and body language and had to rather rely on their skills to pick up the same over a phone call. Whenever an individual required more intense psycho-social interventions they where linked to local mental health resources to ensure adequate care is provided.
- Use of video-conferencing is one possible solution for this, but while addressing a large population it may not be feasible but it is definite solution when addressing a small targeted population where confidentiality may be ensured.
- Getting calls concerning logistical issues and not being able to help directly with their resolution. This often posed the dilemma in the volunteer of what their role was; especially while addressing non-mental health related concerns. This was noted to impact the volunteer’s motivation to continue to be at the front-line. The volunteers were provided with various resource links that could be provided to the callers and the team of supervisors encouraged the volunteers to discuss the challenges they faced.
- Hand-holding by the more experienced mental health professionals was extremely helpful to boost their confidence in handling callers whose concerns may bring about negative emotions in the volunteer.
- The volunteers coming from varied backgrounds and experience in mental health, was a challenge to make the service as uniform as possible so that no one distressed individual receives sub par service. Providing Standard Operational Procedures (SOPs) to address the concerns was done to ensure fair amount of uniformity in the service and also would enable the volunteer to provide psycosocial intervention more efficiently over the phone call.
- The helpline could be more useful if it was directly linked to other resources to ensure adequate care is provided.
- Individuals with acute psychiatric emergencies posed difficulty to address over a phone call, attempts were made by linking with known local resources of mental health professionals. Having a more streamlined Centralised direct referral system would prove more effective and less time-consuming in the future.

5. Conclusion

In India, we are at an early phase of the pandemic and its long-term consequences in terms of health, employment and economic sectors is still yet to be seen. We believe helplines are beneficial in allaying distress of the people at present and mitigating the risk of long-term psychological implications of the pandemic on the mental health front. Various NGOs and mental health professionals have opened up helplines to addresses specific issues of the individuals. We believe telephonic helplines are the first step to breaking the barriers for the general public to reach out for help moving forward from planning to action stage. The helpline is just the beginning when it comes to the overall mental health preparation and we may need to brace ourselves for the large numbers of people affected by mental health issues in the near future.

Financial Disclosure

The Authors have no Financial Disclosure to declare pertaining to the manuscript study submitted for publication.

Declaration of Competing Interest

The authors report no declarations of interest.

Acknowledgements

The authors would like to thank Ministry of Health and Family Welfare, Government of India for their support and the administration of National Institute of Mental health and Neurosciences (NIMHANS), Bangalore, India. The authors express gratitude to the 260 volunteers who have been working tirelessly for the helpline and made the service reach out to the people.

References

Venkatesh, A., Edirappuli, S., 2020. Social distancing in covid-19: what are the mental health implications? BMJ. 369, m1379. https://doi.org/10.1136/bmj.m1379. Published 2020 Apr 6.
Galea, S., Merchant, R.M., Lurie, N., 2020. The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention. JAMA Intern Med. 180 (6), 817–818. https://doi.org/10.1001/jamainternmed.2020.1562.
Gilat, I., Shabat, G., 2007. Emotional first aid for a suicide crisis: comparison between Telephonic hotline and internet. Psychiatry. 70 (1), 12–18. https://doi.org/10.152/pycs.2007.70.1.12.
Golberstein, E., Wen, H., Miller, B.F., 2020. Coronavirus Disease 2019 (COVID-19) and Mental Health for Children and Adolescents [published online ahead of print, 2020 Apr 14] JAMA Pediatrics. https://doi.org/10.1001/jamapediatrics.2020.1456.
Shultz, J.M., Forbes, D., 2013. Psychological First Aid: Rapid proliferation and the search for evidence. Disaster Health. 2 (1), 3–12. https://doi.org/10.4161/dsh.26006. Published 2013 Aug 2.
Dong, L., Bousey, J., 2020. Public Mental Health Crisis during COVID-19 Pandemic, China. Emerging Infectious Diseases. 26 (7), 1616–1618. https://doi.org/10.3201/ 2662669220070407.
Jeong, H., Yim, H.W., Song, Y.J., et al., 2016. Mental health status of people isolated due to Middle East Respiratory Syndrome. Epidemiol Health. 38, e2016048. https://doi. org/10.4178/epih.e2016048. Published 2016 Nov 5.
Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., Xu, Y., 2020. A nationwide survey on psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations [published correction appears in Gen Psychiatr. 2020 Apr 27;33(2):e100213corr1]. Gen Psychiatr. 33 (2), e100213. https://doi.org/10.1136/geneprices.2020.100213. Published 2020 Mar 6.
Brooks, S.K., Webster, R.K., Smith, L.E., et al., 2020. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet. 395 (10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30446-8.
Tandon, R., 2020a. COVID-19 and mental health: Preserving humanity, maintaining sanity, and promoting health [published online ahead of print, 2020 Jan 20] Asian J Psychiat. 102256. https://doi.org/10.1016/j.ajp.2020.102256.
Tandon, R., 2020b. The COVID-19 pandemic: personal reflections on editorial responsibility. Asian J Psychiat. 50, 102100. https://doi.org/10.1016/j. ajp.2020.102100.
Bordoloi, S., Khoja, A., 2006. Development of a psychosocial questionnaire and test sheet for teachers, Parents, Students and Other School Personnel to Assess Educational Needs of Survivors of the Tsunami in Calang, Indonesia, In: Advances In Disaster Mental Health And Psychological Support. American Red Cross support, 1 (1), 9–12. https://doi.org/10.1007/978-3-7904-200210-2.
WHO, 2011. War Trauma Foundation and World Vision International. Psychological First Aid: Guide for Field Workers. World Health Organisation. Accessed On April 09 2020. https://www.who.int/mental_health/publications/guide_field_workers/en/.