Protocol for developing telephone-based brief psychosocial intervention for COVID-19 patients in India

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ABSTRACT

Introduction: The ongoing Coronavirus disease 2019 (COVID-19) pandemic has had a huge mental health impact on people, especially the infected population. They are at greater risk of developing psychological symptoms due to the fear of death and developing severe disability, lack of proper treatment and social restrictions, stigma, and discrimination. The early psychological symptoms, if ignored, may have long-term consequences on the health and well-being of COVID patients. Due to the COVID-19 pandemic, the mental health services have been impacted negatively, and the need for technology-based psychological interventions has been identified as an alternative treatment method. Hence, the Telephone-Based Brief Psycho-Social interventions (TBPSI) will be developed for COVID-19 patients. Materials and Method: A five-session tele psychosocial intervention including rapport establishment and assessment, supportive counselling, activity scheduling, relaxation technique, and post-assessment will be developed based on the extensive review of the literature. Face and content validation of the intervention package will be done by the mental health experts. Further, the feasibility of the intervention program will be tested on COVID-19 patients in the Dharwad district, and later, the same will be implemented across the COVID hospitals of Karnataka state. Discussion and Conclusion: The study results may bring new insights into the culturally sensitive technology-oriented interventions during this pandemic in the country. The paradigm may be shifted from routine treatment to cost-effective and time-based intervention in the public health system in India. The telephonic brief psychosocial interventions can be utilised as a mainstream treatment during non-emergency situations as well.

Keywords: COVID-19, mental health, telephone-based psychosocial intervention

Introduction

Coronavirus disease (COVID-19) emerged in December 2019 in China; and has become a major public health concern intimidating humanity.[1] Ever since, the nations across the globe were unrehearsed for the consequences of the novel coronavirus, which has led to unusual and unpredictable circumstances.[2] On January 30, 2020, India reported its first case of COVID-19 in the state of Kerala.[3]
The pandemic has further created a consequential psychological and social impact on people. The extent of the COVID-19 pandemic has led to rising psychological stress, anxiety, depressive disorders, and post-traumatic stress disorder among people all around the world. This catastrophe has caused the greatest challenges amongst people worldwide. Though the impositions like that of lockdown, restrictions on travelling and social life prevent the rapid spread of infection from one individual to another, however, it certainly increases the fearfulness and stigma among the population, resulting in increased psychological and social stress including fear.

As such, the need for technology-based psychological therapies (telepsychotherapy) has been significant in the delivery of mental health care services in these trying times. Telepsychotherapy, as defined by Kalpan, is a psychotherapy conducted by a therapist at a location different from the patient’s through bidirectional communication technology supporting real-time interactivity in the audio, audiovisual, or text modalities. The application of telepsychiatry (also referred to as telepsychotherapy, telemedicine, telecounselling, teletherapy, or telehealth) is very uncommon and not a new practice. Telepsychotherapy can be used for individual as well as group psychotherapy, both in rural and urban areas. Telepsychiatry services have been deep-rooted in countries like Australia and Canada, and the efficacy of these services has been satisfactory for their users. It has primarily shown good impacts in terms of keeping social distance during catastrophic pandemics such as COVID-19. Both the therapists and the clients can utilise telepsychiatric services, as it can prevent the spread of the virus and the therapist can provide the service from their home, office, or practice, and the client can remain at their home even in the lockdown and quarantine situations and can attend the sessions effortlessly. The services such as online cognitive behavioral therapy (CBT) and telephonic interpersonal psychotherapy for depression, anxiety, and insomnia have been used effectively in various countries.

Telepsychotherapy can be helpful in enhancing the mental health of patients and caregivers. Even the risk of suicide among the home isolated patients can be identified, and suicide-focused evidence-based interventions can be practiced either by telephone or online mode as per the convenience of the patients and caregivers. Primary healthcare (PHC) practitioners have acknowledged telehealth as a viable alternative to traditional face-to-face patient consultations, as evidenced by their rising adoption of the technology. During the COVID-19 epidemic, telemedicine has been used on a big scale and at a rapid pace, proving to be an effective technique for meeting primary healthcare demands. The Health Ministry of India established the National Telemedicine Taskforce in 2005, which prepared the path for the success of many programmes such as the Indian Council of Medical Research (ICMR)-AROGYASREE and Village Resource Center (VRCs).

Lately, telemedicine has been an important part of the medical response to COVID-19 because it reduced demand on already overwhelmed healthcare infrastructure and provided for healthcare needs to be fulfilled at home, limiting patient and medical staff exposure. There are different types of e-mental health services being used worldwide.

Extensive studies on the efficacy and equivalency of telephone psychotherapy have been undertaken in the previous five decades, mostly in western countries. However, no study on efficacy, equivalency, or an assessment of the barriers to tele-psychotherapy has been conducted in India. The sole study identified in the Indian setting among COVID-19 patients refers to an exploratory study conducted during COVID-19 in the state of Assam, which involved the profiling of distress callers and the use of tele-counselling services by the Assamese community. Another study was a trial on the feasibility and effectiveness of tele-counselling on the psychological problems of frontline healthcare workers amidst COVID-19 in central India.

In April 2020, the Department of Clinical Psychology at National Institute of Mental Health and Neuro-Sciences (NIMHANS) issued guidelines for telephonic psychotherapy in response to the demand for streamlining telephonic and internet psychotherapy services, particularly amid the continuing COVID-19 epidemic.

Many international bodies have also advocated Brief Psycho-social Interventions (BPSI), and many mental health expert groups provide this intervention to people who are distressed as a result of events such as COVID-19.

The state of Karnataka had the second-highest number of positive cases in India at one point in time. This added distress to the home isolated COVID-19 patients who needed access to mental health services in the present scenario. Therefore, the proposed study intends to test the feasibility of a brief psychosocial intervention on COVID-19 patients in a North Karnataka district of India by following the objectives:

1. To describe the socio-demographic factors of COVID-19 patients in North Karnataka
2. To ascertain the current psychological status of COVID-19 patients in North Karnataka
3. To test the feasibility of telephone-based brief psychosocial interventions among COVID-19 patients.

**Materials and Methods**

**Study design**

This research will be a quasi-experimental study.
Study setting
The study will be conducted among the COVID-19 patients who are in home isolation in their respective communities in the Dharwad district of North Karnataka. DIMHANS (Dharwad Institute of Mental Health and Neuro Science) has been providing tele-psychological interventions to COVID-19 patients in the Dharwad district.

Study population
The study will be conducted among male and female COVID-19 patients who are in home isolation.

Sample size and sampling procedure
A convenient sample of 100 eligible male and female patients aged between 18 years to 50 years, who are diagnosed with COVID-19 and are in home isolation, will be included till the required sample size is achieved, and the patients’ details will be retrieved from the Dharwad district hospital tele-counselling database.

Inclusion and exclusion criteria
The inclusion criteria are: (1) Patient’s age should be between 18 years and 50 years, (2) COVID-19 positive patients in home isolation, and (3) Patients who can use smart mobile for interventions. Exclusion criteria are: (1) Family members of COVID patients, (2) Patients with co-morbid medical and psychiatric conditions, and (3) Patients unwilling to give consent.

Data collection procedure
In North Karnataka, patients with COVID-19 will receive a brief ‘Telephone-based psychosocial intervention’. Participants will be requested to complete questionnaires twice, once as a Pre-test and once as a Post-test, with questions about socio-demographic information and psychosocial status. The principal investigator (PI) and the team will provide five sessions, each lasting 30–35 minutes, for each participant.

Rapport establishment
Rapport has been described as “the relative harmony and smoothness of relations between people” [Table 1]. It is a highly valued part of clinical practice. The goal of developing rapport includes enabling the patient to feel understood, valued, and supported, reducing the potential conflict between the therapist and patient, and developing and maintaining a continuing relationship over time.

Supportive counselling
Supportive counselling is a psychological intervention designed to improve, reinforce, or sustain a client’s physiological well-being or psychological self-esteem and self-reliance. Supportive approaches foster the client’s positive feelings towards the therapist and provide a safe forum for the expression of feelings. Therapeutic issues may include the human concerns raised by having a persistent psychiatric illness, problems in managing the disorder, and normal problems of living. The specific strategies that comprise supportive counselling may include providing reassurance, offering explanations and clarification, and giving guidance and suggestions.

Activity scheduling
It is a treatment to modify behaviour during psychological problems. It is a behavioural activation process through which an individual’s day is organised according to activities with his/her own plan and related to their current psychological status. The main aim of the activity schedule is to increase the activity level by engaging oneself in useful tasks, learning punctuality, to distract the patient from active psychological distress, and to demonstrate to the patient that change is possible, even if it is slow. Activity scheduling can be effective in enhancing the independent behaviour of an individual with mental health issues during the COVID-19 pandemic.

Relaxation technique
The relaxation technique plays an important role in relieving stress while incorporated into daily activities. Primarily, relaxation techniques are meant to reduce anxiety, stress, and tension. Various types of relaxation techniques such as meditation, biofeedback, progressive muscle relaxation, applied relaxation, guided imagery, and paced breathing are significant in relieving stress. We are planning to provide the ‘progressive muscle relaxation’ technique as it improves the quality of sleep during the COVID-19 quarantine and also is easy to learn.

Data management and statistical analysis
The data will be entered and analysed in the statistical software Epi Info 7.2.4. Categorical variables will be summarised as percentages, and quantitative variables will be summarised as mean with standard deviation (SD), or median with inter-quartile range (IQR) according to the distribution of the variable. Appropriate statistical tests will be used to compare the outcome (coping skills, resilience, well-being, and quality of life) between sub-groups.

Quality assurance
Those involved in data collection/entry (junior research fellow and data entry operator) will be trained in standardised guidelines on handling human participants in research. The interview process will be standardised by training all those who are involved in data collection/entry with the help of a question-by-question guide. The Brief Psycho-social Interventions (BPSI) will be developed by the research team, and the same will be validated by mental health experts. Double data entry, followed by data validation, will be done to minimise data entry errors.

Human subject protection
Written informed consent will be obtained from all participants via WhatsApp, mail, or text message. Patients’ confidentiality will be maintained using codes and unique IDs. After obtaining consent, the patients will be explained the purpose of the study, the therapeutic approach, the psychological procedure, and the methods of assessment. The patients will be made aware of their rights to withdraw at any stage of the study.
Studies have demonstrated that telehealth has the potential to mobilise all aspects of healthcare potentials in order to reduce disease transmission, direct people to the appropriate level of care, ensure the safety of providing health services online, protect patients, clinicians, and the community from infection, and reduce the burden on healthcare providers and the health system. During an epidemic of an infectious illness, technology can be used to provide remote triaging of care.

Expected benefits of the study

From this study, we will develop and implement the ‘Brief Psycho-social Interventions (BPSI)’ among the COVID-19 patients to reduce the psychological distress secondary to COVID-19. The intervention can then be implemented across the Karnataka state.

Discussion

This study aims to develop ‘Telephone Based Brief Psychosocial Intervention’ for COVID-19 patients in Karnataka, India. This is an effort to systemise the process of intervention by utilising the available interventions, guidelines, and frameworks. A Telephone-based Brief Psychosocial Intervention for Covid-19 patients would be developed that can be used across various COVID hospitals, care centres, and treatment facilities in the Karnataka state.

We will review the existing COVID interventions available nationally and internationally and develop our intervention package. Face and content validation of the intervention package will be conducted by the mental health experts. The technology-oriented brief psychosocial intervention will be pilot-tested among 10% of the study population, and the final version will be used for all the patients in the Dharwad district.

The COVID-19 epidemic has once again exposed the gap between the need for mental health practitioners and their availability in India. The significance of psychological well-being has been emphasised in several studies since the COVID-19 pandemic, despite the lack of data-driven proof of psychological treatments. A study undertaken on internet-based self-help intervention for a group of COVID-19 patients suffering from psychological distress proved effective in considerably lowering the levels of depression and anxiety symptoms than those in the control group.

Some of the primary advantages of telespsychology are the reduced consultation waiting times because they take place at home or at work, hence saving time and money with lower travel and rental costs for the office both for those who supply the service and those who use it. Tele Mental Health appears to be a beneficial method of therapy delivery for a variety of reasons, according to a previous study.

The COVID-19 pandemic has unveiled different insights into the importance of providing mental health services, particularly by bringing teletherapy and tele-counselling to the forefront as a means of providing crisis support. Telehealth has the potential to reduce the psychological distress secondary to COVID-19. The intervention can then be implemented across the Karnataka state.

Bias and limitations

The researchers would examine a selection of socio-demographic variables with the general population and the distribution of the other clinically relevant factors to address selection bias. All measurements and interviews will be performed in a standardised manner. This will reduce the information bias. Major limitation of the study is the lack of a direct counselling facility as the proposed...
study is an online-based intervention due to the COVID-19 treatment protocol.

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**Conflicts of interest**

There are no conflicts of interest.

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