Original paper

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Impact of the COVID-19 pandemic on treatment adherence and the caregivers' preference regarding telepsychiatry services at a specialized child and adolescent mental health service in a teaching hospital in Sri Lanka

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Abstract

Background

Despite the increase in mental health problems, many countries have reported disruptions in the delivery of the mental health services during the COVID-19 pandemic.

Aims

We aimed to assess the impact of the COVID-19 pandemic on the treatment compliance of patients attending a child and adolescent mental health service (CAMHS) in Sri Lanka and to assess the caregivers' views on telepsychiatry.

Methods

A telephone survey was carried out among parents/caregivers of 105 newly registered patients of the CAMHS of the Colombo South Teaching Hospital, Sri Lanka between 2019 to 2021. Data on sociodemographic details, treatment compliance and preferred choice of contact during lockdown was obtained using a semi-structured interview.

Results

Sixty per cent of the patients had defaulted treatment during the lockdowns, with the rate of defaulting treatment being significantly higher in those receiving only non-pharmacological therapies. The main reason for defaulting treatment was the lack of transport facilities (47.1%). The majority (81.9%) of the participants wished to be contacted by the CAMHS, with video calls through applications such as WhatsApp or Viber.

Conclusions

Telepsychiatry via video calls may be an alternative way of providing child psychiatry services during medical or other emergency situations in Sri Lanka.

Key words: Child and adolescent, mental health, COVID-19, telepsychiatry, compliance

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Introduction

The first patient with COVID-19 in Sri Lanka was detected in March 2020, and immediately the first of a series of lockdowns were imposed to control the spread of the infection. As the number of cases increased, two further lockdowns were imposed with the most recent in August 2021, which lasted six weeks.

These lockdown measures have been found to result in increased rates of negative consequences on the mental health of children and adolescents due to the closure of schools, social isolation and higher exposure of children to family conflicts (1). Despite the increase in mental health problems, disruption in the delivery and underutilization of mental health services have been reported globally during the pandemic (2).

The World Health Organization (WHO) has highlighted the need to continue uninterrupted mental health services to meet the increased demand during the pandemic (3). Even though more than 80% of the high-income countries have reportedly deployed telepsychiatry to bridge the gaps in mental health services during the pandemic, less than 50% of low-income countries have used such technology during this period (3).

Therefore, we aimed to assess the impact of the pandemic on the treatment compliance of patients attending a child and adolescent mental health service (CAMHS) in Sri Lanka and to assess the views of the parents/caregivers of patients on receiving services through telepsychiatry.

Methods

We conducted a survey among the parents/caregivers who were being followed up at the CAMHS of the Colombo South Teaching Hospital (CSTH). One hundred and five (105) patients who had their first presentation to CAMHS prior to the onset of the pandemic (in 2019) and in between the periods of lockdown (2020 and 2021) were selected using systematic random sampling. A semi-structured telephone interview was carried out with the parents of the patients to obtain information on sociodemographic details, treatment compliance and preferred choice of contact during the lockdown. Ethical clearance was obtained from the Ethics Review Committee of the Colombo South Teaching Hospital (ERC 952/2021) and verbal consent was obtained from the parents to carry out the study.

Results

The majority (70.5%) of the sample were male patients from the Colombo district (70.5%), and in the age group of 12-18 years (53.3%). The commonest diagnosis among the study sample was attention deficit hyperactivity disorder (ADHD) (50.5%), followed by depression (20.0%). Forty one per cent had been attending the services for more than one year. The majority (88.6%) were receiving pharmacological treatment (either alone or in combination with non-pharmacological treatment), while 11.4% were receiving only non-pharmacological interventions.

Sixty per cent of the study group had defaulted treatment during the lockdowns. More than half (53.7%) of those who received pharmacological therapy and all patients who received non-pharmacological treatment had defaulted treatment. The rate of defaulting treatment during the pandemic was significantly higher in those receiving non-pharmacological therapies ($P<0.01$), compared to those receiving pharmacological treatment. Lack of transport facilities during the lockdowns (47.1%) was the main reason for defaulting treatment. Other reasons for the non-adherence included improvement of symptoms (22.8%) and in the case of certain conditions, especially in those with ADHD, believing that treatment was not necessary as the schools were closed (15.7%). Among the study group, 20% had a family member who had been infected with COVID-19 and this group was significantly more likely to default treatment ($P<0.05$) than those who did not have a family member infected with COVID-19. The rate of defaulting treatment was not associated with the child's age, gender, area of residence or financial status of the family during the pandemic. Worsening of the symptoms was reported in 41.2% who had defaulted treatment. There was no association between the perceived worsening of symptoms with gender, age or the treatment modality.

The majority (81.9%) of the sample wished to be contacted by the CAMHS via voice or video calls and 61.9% preferred their medications to be posted to them. Video calls through WhatsApp or Viber were the preferred choice of contact (62.5%), while 34% preferred contact through voice calls only. More than 90 (91.4%) of the participants had smartphones. Out of the study group, 67.6% were planning to visit the mental health service once the lockdown was lifted. The absence of features suggesting worsening of symptoms after defaulting treatment (38.2%), the fear of being exposed to COVID-19 if they visited the hospital (14.7%) and the belief that medication was not needed as there was no school (14.7%), were the commonest reasons for not wanting to revisit the CAMHS once the lockdown was lifted.

Discussion

The outpatient clinics of the CAMHS of the CSTH did not function during the lockdowns. A substantial proportion of patients were found to have defaulted treatment during the lockdown. There is a scarcity of data regarding treatment adherence during the pandemic among those followed up by CAMHS in other countries. However, the percentage who defaulted treatment in our sample was similar to that described by Demir et al., in a study done among adult psychiatry patients in Turkey (4).

The main reason for defaulting treatment in our study was the non-availability of transport. Public transport did not operate during the lockdown periods, and this would have made access to hospitals difficult for the patients and their carers (5). To overcome this issue, the government of Sri Lanka advised hospitals to post the medications of patients suffering from non-communicable diseases to their homes during the lockdown. However, there was no possibility of assessing the improvement or deterioration of symptoms or side effects of medications during this period. In addition, as was found in our study, there was a complete interruption in the delivery of non-pharmacological treatment methods. Therefore, it is essential to develop alternative ways of reviewing and providing treatment to patients in times of future lockdowns for any reason.

Despite being used in many other countries to improve the accessibility and provision of services, telepsychiatry is not yet well-established in Sri Lanka (6). Various forms

of telemedicine have emerged in Sri Lanka over the past decade, however, these have been developed in an ad-hoc manner and no attempts have been made to streamline and upgrade these processes (6). Our survey shows that telepsychiatry is a feasible option, as 90% of the participants had smartphones and the majority wished to be contacted by the CAMHS either through video calls or voice calls. Previous studies have also shown that telemedicine is accepted by more than 90% of the people living in urban as well as rural areas of Sri Lanka (7). However, the scarcity of infrastructure within the Sri Lankan hospital settings, such as lack of high-speed broadband connections, exclusive phone lines, separate telephone numbers for managing consultations and lack of hardware and appropriate software may limit the use of telepsychiatry in our settings. Furthermore, platforms such as WhatsApp for telepsychiatry should be adopted with caution due to the risk of breach of confidentiality.

Limitations

Our study was conducted in a teaching hospital in the Colombo district, where access to technology may be higher than in rural areas. Therefore, it may be difficult to generalize these results to the entire population receiving CAMHS in Sri Lanka.

Conclusions

Given the severe disruption to mental health services and the increasing burden of mental health problems due to the pandemic, urgent attention should be given to designing alternative ways of delivering mental health services in the Sri Lankan setting during medical or other emergencies which may result in lockdowns in the country.

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None.

Statement of contribution

All authors were responsible for the conception and design of the work. YR analysed and interpreted the data and drafted the paper. All authors approved the final manuscript.

Declaration of interests

None declared.

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