

**ORIGINAL ARTICLE:**

**IMPACT OF CREATING MENTAL HEALTH HELPLINE AT A TERTIARY CARE PSYCHIATRIC SET-UP IN PAKISTAN DURING THE COVID-19 PANDEMIC**

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**ABSTRACT**

**OBJECTIVES**

To analyse the calls received at a 24-hour helpline service at the Institute of Psychiatry during the first wave of the COVID-19 pandemic for the demographics of the service users, the reasons for calling, and the guidance provided.

**STUDY DESIGN**

Descriptive retrospective clinical audit

**PLACE AND DURATION OF STUDY**

The Institute of Psychiatry, Rawalpindi Medical University from June 2020 and February 2021.

**METHOD**

The call records by psychiatry residents managing the helpline were analysed. Data regarding age, area of residence, and reasons for calling by the service users of the helpline, as well as the advice given by the resident on call were extracted. The findings were evaluated in terms of age, geographical distribution, reasons for seeking assistance, and the type of guidance provided. For data, compilation descriptive statistics were employed.

**RESULTS**

Of the 102 calls analysed, most of the callers were between 30 to 39 years of age (33.3%), and hailed from Rawalpindi (78.4%), followed by Kashmir (5.9%), Chakwal (4.9%) and Murree (3.9%). The most frequently stated reasons for calling were to ask about availability of out-patient services (36.3%), to have medication revised (23.5%), and to enquire about the side effects of medication (11.8%). The responses to the callers were invitation to come to the hospital (44.1%), provision of relevant information about the particular questions asked (36.3%), adjustment of medications (11.8%), and prescribing medication with advice of physical follow-up (7.8%).

**CONCLUSION**

There is a need to incorporate the use of technology in the delivery of psychiatric services to enhance accessibility and allow convenience. Future research should optimize interventions, assess long-term outcomes, and address challenges like privacy and access.

**Key Words:** COVID-19, tele-psychiatry, helpline

**INTRODUCTION**

With its vast population of over 230 million, Pakistan struggles to keep pace in terms of mental health resources. (1) There are 400 qualified psychiatrists in the country. (2) There are approximately 3729 outpatient mental health facilities, which serve about 343.34 individuals per 100,000 from the general population. (3) About 1% of these facilities offer mental health mobile teams for community service. (3) The COVID-19 pandemic caused widespread global disruption in mental health services. (4) Unsurprisingly, Pakistan's already dismal situation was further affected due to both increased demand and decreased availability of psychiatric services. Not only were pre-existing mental illnesses worsened, but new cases also emerged. Factors leading to a greater demand included social isolation, physical stress of the illness and hospitalizations, and multiple psychosocial stressors like financial constraints due to business disruption, fear

of illness, and health problems. (5) During the peak period of the COVID-19 pandemic, the Institute of Psychiatry at Rawalpindi Medical University, the largest psychiatric facility in Rawalpindi and its surrounding areas, was repurposed into a COVID-19 filter clinic and ward for several months. A make-shift arrangement to provide psychiatric emergency services was made in a nearby building, but the department suffered shortage of staff (due to COVID-19 duties and infection among the healthcare providers themselves). Patients also found it difficult to reach the facility due to lockdown in the province. The disruption in face-to-face psychiatric services necessitated the establishment of tele-psychiatric facilities in many countries to ensure continued patient care. In response to this need, a 24/7 telephonic helpline service was initiated at the Institute of Psychiatry in May 2020. With our current study, we aim to analyze the impact of this service in meeting the needs of the population. This can help us improve services and leave us better prepared for unforeseen emergencies in the future.

## Objectives

1. To assess the demographics of people who used the 24-hour mental health helpline service during the first wave of the COVID-19 pandemic, including age and place of residence.
2. To assess the primary reasons for individuals calling the COVID-19 pandemic mental health helpline, such as inquiries about outpatient services, medication-related concerns, the presence of new psychiatric symptoms; and the advice given by the resident doctor.

## METHOD

The Institute of Psychiatry, (xxx) Hospital in Rawalpindi, Pakistan, was the site of this study, which was approved by the appropriate ethical committee. The first waves of the COVID-19 pandemic coincided with the study's June 2020–February 2021 period. The study assessed the use and efficacy of a 24-hour mental health helpline set up at this psychiatric facility during the pandemic using a descriptive, retrospective clinical audit design.

Utilising a non-randomized consecutive sampling technique, the information from each of the 102 people who called the helpline within the allotted time frame was examined. The demographics of service users, the reasons behind their calls to the helpline, and the advice and support given during these exchanges were all recorded as part of the data collection process. All of the data was entered into specifically created electronic forms for analysis.

The statistical analysis was performed using SPSS version 26, which allowed for a thorough evaluation of the findings in terms of age, geographical distribution, reasons for seeking assistance, and the type of guidance provided. This research design allowed for a thorough examination of the effectiveness and utilization of the helpline service in addressing mental health needs in the midst of the COVID-19 pandemic.

## RESULTS

Table 1

Demographic characteristics of the patients approaching through helpline (N= 102)

Variable	Frequency	Percentage
<b>Age</b>		
Less than 18 years	4	3.9
19 to 29 years	33	32.4
30 to 39 years	34	33.3
40 to 49 years	22	21.6
50 to 59 years	7	6.9

<b>Residence</b>	More than 60 years	2	2.0
	Rawalpindi	80	78.4
	Attock	2	2.0
	Chakwal	5	4.9
	Mianwali	3	2.9
	Jhelum	1	1.0
	Murree	4	3.9
	Kashmir	6	5.9
	Gilgit	1	1.0

Age distribution (Table I; Figure I) of the patients approaching through IOP helpline explains that about 3.9% patients were of 18 years of age and less, around 32.4% of them were from 19 to 29 years of age, around 33.3% of them were 30 to 39 years old, about 21.6% were 40 to 49 years old, about 6.9% of them were from 50 to 59 years of age whereas about 2.0% of them were 60 years old and more. This indicates that most of the patients approaching through IOP helpline were from 30 to 39 years of age.

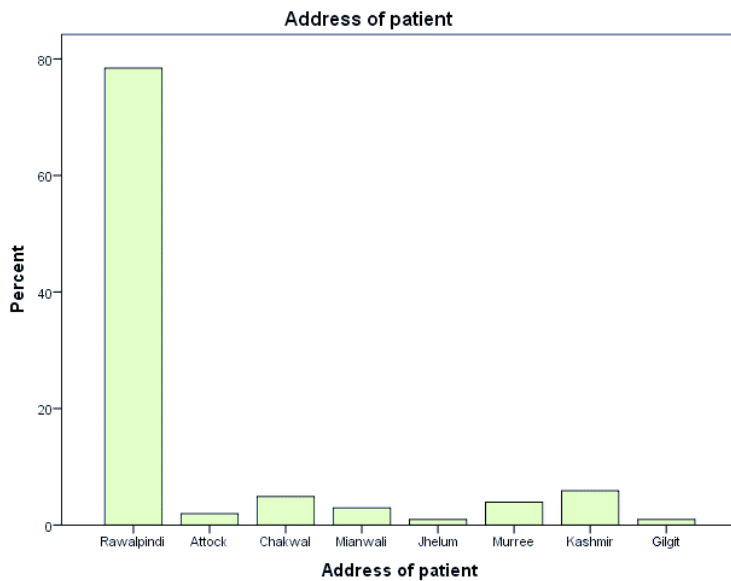
**Figure 1**

**Bar chart showing the age distribution of service users**



Residential status of the patients approaching through IOP helpline (Table I; Figure II) shows that majority of the patients (78.4%) belonged to Rawalpindi district (Punjab) whereas its nearby tehsils included 2% from Attock, 4.9% from Chakwal, 2.9% from Mianwali and 1% from Jhelum. On the other hand, a relatively small proportion of the patients approached from other regions including 3.9% of Murree, 5.9% of Kashmir and 1% of Gilgit. This indicates that most of the sample was from Punjab region, mainly from Rawalpindi.

**Figure 2**  
**Geographical distribution of service users**

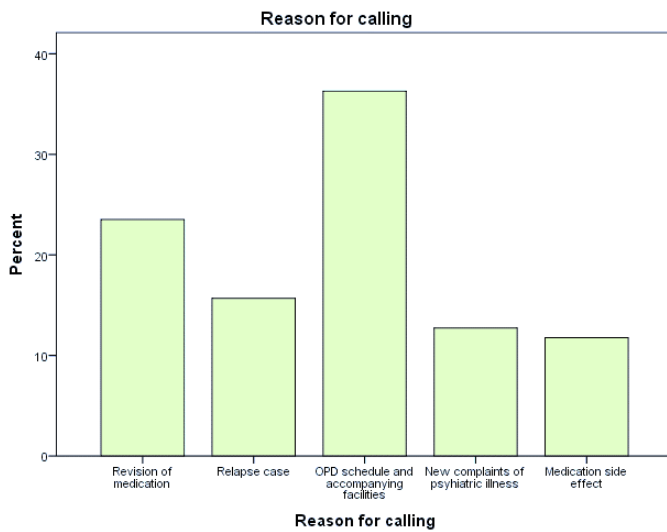


**Table 2**  
**Frequency of the reason of patients approaching through helpline and the appropriate advice given to them (N= 102)**

Variable	Frequency	Percentage
<b>Reason for calling</b>		
Revision of medication	24	23.5
Relapse case	16	15.7
OPD schedule and accompanying facilities	37	36.3
New complaints of psychiatric illness	13	12.7
Medication side effect	12	11.8
<b>Advice</b>		
Invited in OPD	45	44.1
Information provided	37	36.3
Prescription and follow up (OPD)	8	7.8
Medication adjusted	12	11.8

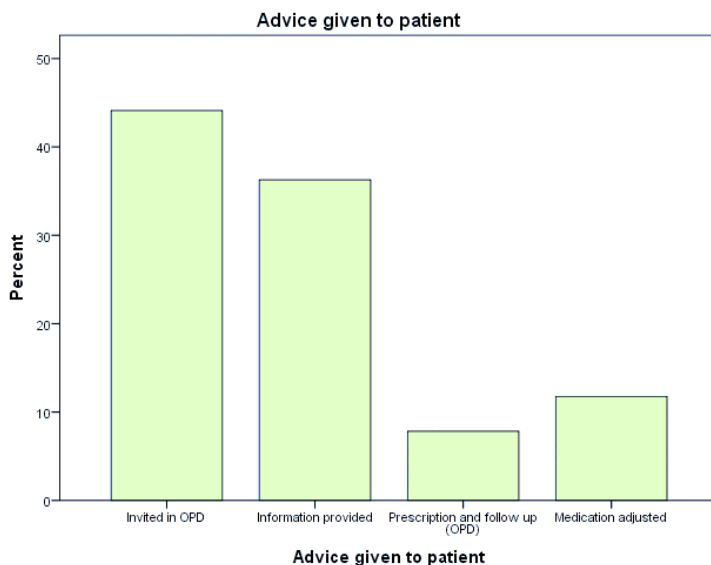
Data regarding the patients approaching through IOP helpline (Table II; Figure III) explain that around 23.5% of the patients called for the revision of their medication, any adjustment in their dose or medication as their course continues, about 15.7% of them reported relapse as their symptoms reappeared, around 36.3% of them needed the information regarding OPD schedule as per the COVID's situation whereas 12.7% of the patients reported new complaints of psychiatric illness and contacted the Institute of Psychiatry for the first time and 11.8% of them called to report the side effects of the medication they are facing that were prescribed to them earlier. This indicates that most of the patients were concerned about the updated OPD schedule in the scenario of the COVID pandemic, availability of their consultant and for the inquiry of availability of accompanying facilities as well.

**Figure 3**  
**Frequencies of various queries made by service users**



Results of the advice given to the patients approaching through IOP helpline (Table II; Figure IV) shows that around 44.1% of the patients were invited to the OPD according to the updated schedule as per the COVID protocols and SOPs; 36% were provided with the information regarding the functioning of the Institute of Psychiatry at that time; prescriptions provided and subsequent follow-up advised to 7.8%; whereas medicines and their appropriate doses were adjusted for 11.8% of them. This indicates that as most of the patients called for information, and that was duly provided.

**Figure 4**  
**Frequency of the various categories of responses given to the service users**



## DISCUSSION

Like Pakistan, a number of countries shifted to provision of remote psychiatric services during the COVID-19 pandemic. (6 - 9) Even in countries where such services were already available, an increased dependency and uptake was noted. (10, 11) A total of 102 consultations were noted in 9 months from the start of tele-

psychiatric service at the Institute of Psychiatry. Although this is a meagre number compared to the general OPD attendance at the Institute (which numbers around 200 patients per OPD day); it was still a significant figure considering that the service was new and information about its set-up could not be disseminated effectively despite being displayed at several areas in the hospital and also stamped on psychiatry OPD slips. Accessibility to services has been identified as a problem in other studies as well, such as one reported in our neighboring country India. (12) To improve service usage, its information can further be propagated through social media.

Regarding the demographics of the callers, most were adults from young to middle-aged groups. A study in India has also noted most of the callers being from the young age group, whereas a Portuguese study identified most of the callers as being middle to old age. (13, 14) This difference may be because the latter study only considered patients themselves, while the former as well as our own study counted people calling in proxy of their relatives as well. Thus old aged people may be predominant in the latter study as they are more vulnerable to developing psychological distress in the pandemic; whereas the young and middle aged groups -- greater in number in the other studies -- are expected to take care of other family members and may have called more on the behalf of others.

Most of our callers hailed from within Rawalpindi, but a number of consultations were also sought from other cities, as far off as Kashmir and Gilgit. This highlights the need for strengthening our services further to benefit patients from far-flung areas with limited access to psychiatric facilities as well. For the future, the department is planning to specify days for remote consultations from other hospitals, starting from other public-sector hospitals in Rawalpindi, and moving over to collaborate with hospitals in other cities as well. Collaboration with other helplines and research institutions can also help benchmark performance and share best practices.

As noted earlier, psychiatric services at the Institute were largely disrupted at the start of the pandemic. This led to confusion and uncertainty regarding in-person service availability in the masses. Many of the callers at our helpline therefore called only to inquire about the OPD schedule and availability of other mental health facilities. For this reason, while improving tele-psychiatric services, the service-providers can be given information sheets with FAQs to facilitate the callers. The second most frequent queries were regarding new-onset or recurring psychiatric symptoms. International studies show similar patterns of inquiries made during tele-psychiatric consultations. (15, 16) Revision of medication was another important concern, as also observed in a similar study looking into helpline data in the pandemic. (14)

The people calling for information regarding services were provided the information required. Wherever possible, psychological and pharmacological help was provided on call. However, a large number of people had to be called for a face-to-face consultation as well. This proportion of patients was greater in our study compared to many international ones which report that most cases were dealt with through psychological interventions and very few had to be referred to emergency services. (7, 13, 16, 17). A possible reason behind this difference could be that our helpline was not functioning on a toll-free number, and many a times the callers would be in a hurry to hang up, making detailed evaluation, let alone delivery of psychological interventions, difficult. Also, because the helpline phone calls were managed by on-call residents who were simultaneously dealing with in-person and emergency visits as well, a lot of time could not be spared for telephonic consultations. Thirdly, without video conferencing facility to see the patients, or reliable knowledge of their physical health, it was felt that practicing caution by seeing the patients in person would be better than closing the cases on phone. In the light of these issues, for the future, along with a resident psychiatrist, a trained clinical psychologist can also be tasked with providing brief psychological interventions through tele-psychiatry. Introducing a toll-free number is also under consideration to

encourage longer interactions, allowing for a more in-depth assessment and potentially reducing the need for in-person consultations. Incorporation of video conferencing tools can facilitate remote visual assessments, which can improve the quality of care and reduce the necessity for physical visits.

## CONCLUSION

Our tele-psychiatric services during the COVID-19 pandemic provided a number of benefits like continued service delivery, safety from further transmission of the virus, and the convenience of timely and cost-efficient consultations and provision of information. However, due to limited knowledge of its availability, shortage of staff to deliver helpline services, and absence of video consultations, its full potential could not be achieved. There is a need to set up improved tele-psychiatric services at a larger scale that function not only during emergencies, but at all times. Follow-up studies can be done after making improvements in the current set-up to further assess the effectiveness of the helpline.

## REFERENCES

1. <https://datatopics.worldbank.org/world-development-indicators/>
2. Javed A, Khan MN, Nasar A, Rasheed A. Mental healthcare in Pakistan. *Taiwanese Journal of Psychiatry*. 2020 Jan 1;34(1):6.
3. World Health Organization: Mental Health Atlas. Geneva: World Health Organization, 2017.
4. Brunier A, Drysdale C. COVID-19 disrupting mental health services in most countries, WHO survey. *World Heal Organ*. 2020.
5. Xiong J, Lipsitz O, Nasri F, Lui LM, Gill H, Phan L, Chen-Li D, Iacobucci M, Ho R, Majeed A, McIntyre RS. Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of affective disorders*. 2020 Aug 8.
6. Roncero C, García-Ullán L, de la Iglesia-Larrad JI, Martín C, Andrés P, Ojeda A, et al. The response of the mental health network of the Salamanca area to the COVID-19 pandemic: the role of the telemedicine. *Psychiatry Res*. 2020;291:113252
7. Peppou LE, Economou M, Skali T, Papageorgiou C. From economic crisis to the COVID-19 pandemic crisis: evidence from a mental health helpline in Greece. *European archives of psychiatry and clinical neuroscience*. 2021 Mar;271(2):407-9.
8. Sosa Lovera A, Ureña AJ, Arias J, Araujo Rodríguez A, Canario Guzmán JA. Psychological helpline in response to the COVID-19 pandemic in the Dominican Republic. *Counselling and Psychotherapy Research*. 2021.
9. Abdelghaffar W, Haloui N, Bouchrika N, Yaakoubi S, Sarhane A, Kalai E, Siala N, Boulehmi H, Trabelsi S, Bourgou S, Charfi F. Psychological support unit design and implementation during COVID-19 pandemic: Case of Mongi Slim Hospital, Tunisia. *Avicenna*. 2021 Sep 7;2021(1):2.
10. Turkington R, Mulvenna M, Bond RR, Ennis E, Potts C, Moore C, Hamra L, Morrissey J, Isaksen M, Scowcroft E, O'Neill S. The impact of COVID-19 pandemic on calls to Samaritans' telephone helpline in the UK and ROI. *InIASP World Congress 2021 Sep 22*.
11. Turkington R, Mulvenna M, Bond R, Ennis E, Potts C, Moore C, Hamra L, Morrissey J, Isaksen M, Scowcroft E, O'Neill S. Behavior of Callers to a Crisis Helpline Before and During the COVID-19 Pandemic: Quantitative Data Analysis. *JMIR Mental Health*. 2020;7(11):e22984.
12. Pandya A, Saha S, Kotwani P, Patwardhan V. Three tier mental health-care service delivery during COVID-19 pandemic in India. *Journal of Mental Health and Human Behaviour*. 2020 Jul 1;25(2):143.
13. Hazarika M, Das B, Das S, Baruah A, Sharma N, Barua C, Das J, Choudhury S, Hazarika D, Sarma P, Bhandari SS. Profile of distress callers and service utilisation of tele-counselling among the population of Assam, India: an exploratory study during COVID-19. *Open journal of psychiatry & allied sciences*. 2021 Jan;12(1):7.
14. Jesus B, Ramos SF, Soares MF, Correia JM, Sousa DC, Caetano S. COVID-19 mental health helpline: A tool for a rural population. *European Psychiatry*. 2021 Apr;64(S1):S285-.

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15. Scerri J, Sammut A, Cilia Vincenti S, Grech P, Galea M, Scerri C, Calleja Bitar D, Dimech Sant S. Reaching out for Help: Calls to a Mental Health Helpline Prior to and during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*. 2021 Jan;18(9):4505.
16. Zabrzygraj A, Świtaj P. Helpline provision during the first wave of the COVID-19 pandemic: experiences of the Mokotow Mental Health Center. *Advances in Psychiatry and Neurology/Postępy Psychiatrii i Neurologii*.;30(1):1-1.
17. Shakya DR. Observation and Lesson from Psychiatry Help-Line of a Teaching Hospital in Eastern Nepal during COVID-19 Pandemic Lockdown. *Clin Med*. 2020;2(1):1021.

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3	Fakiha Shabbir	Research Officer, Jinnah Centre for Character and Leadership, Pakistan Air Force	Formal Analysis, Investigations, Methodology, Project Administration
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