Survey on the psychosocial impact of COVID-19 on the Sri Lankan mental healthcare system and the needs of frontline healthcare workers in the post-covid era

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Abstract

Introduction: The COVID-19 pandemic severely strained the healthcare in Sri Lanka. The subsequent economic crisis compounded this issue. Priority was given to treating those afflicted with COVID-19 and preventing its spread, and healthcare staff faced immense difficulties dealing with the situation. The psychosocial impact of COVID on health care staff has not been properly assessed or addressed.

Objectives: A study was conducted to identify the psychosocial impact of COVID-19 among four different categories of health care workers, and perform a needs assessment among these groups.

Methods: A convenient sample of frontline health workers, mental health teams, 1926 mental health helpline workers and 1990 Suwa Sariya emergency ambulance service staff were assessed via a self-administered questionnaire for mental health impact, work capacities and needs.

Results: Among frontline workers (n=188), 42.5% experienced anxiety symptoms, 12.8% depressive symptoms and 4.1% suicidal thoughts. Most (58.9%) lacked a psychological support system at the workplace. Only 20% have accessed specific programs or services at their workplace to obtain support for mental health issues, and all have benefitted from them. All categories of health workers lacked training and resources.

Conclusion: The findings demonstrate that a significant amount of health care workers undergo psychological problems in the course of their work especially in the aftermath of the COVID-19 pandemic. The analysis reveals that Sri Lanka lacks structured psychological support systems for health workers and needs more resources and training. Psychological support for health workers through strengthening resources and training should be prioritised when planning service development.

Background

Sri Lanka is currently facing an unprecedented economic crisis. The effects of this on the mental health of the public possibly further intensified that of COVID-19 [1]. From January 2020 to July 2022, 664,138 cases were confirmed, and 16,521 deaths were reported [2]. After enduring three waves, the nation's health systems were exhausted by the last, with a case fatality rate of 2.8%. More than 65% of the affected people were between the ages of 20-60 years and represented the country's workforce, reflecting the pandemic's negative impact on the country's vitality [2].

The pandemic has, in many ways, contributed to the collapse of the economy, political instability and virtual collapse of the domestic economy [1]. The COVID-19 pandemic and its outcomes have affected the general population and healthcare workers' physical, mental, and social wellbeing [3].

As the government had mainly focused on controlling COVID-19 spread, addressing its psychosocial impact was neglected. The pre-existing vulnerabilities of the healthcare system, such as the lack of formal training at the grass-root level and the scarcity of physical and monetary

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resources, have paralysed the healthcare workers in helping the vulnerable as well as their own families [4,5]. Therefore, there is a dire need to assess the psychosocial impact of COVID-19 on healthcare workers and the subsequent post-COVID situation to address relevant issues.

Methods

Study setting

The survey assessed the psychosocial impact of COVID-19 and needs of four categories of healthcare workers: frontline workers, mental health teams of Sri Lanka, the National Mental Health Helpline (1926) team, and Suwa Seriya (1990) mobile emergency service workers.

The frontline health workers and mental health teams were from the National Hospital of Sri Lanka, Kalubowila Hospital, Ragama Hospital, Lady Ridgeway Hospital, National Institute of Mental Health, Trincomalee Hospital, and Hambantota Hospital.

Study participants

Four categories of healthcare workers were identified as being important and different to each other:

Frontline healthcare workers: Healthcare workers working on the frontline during the crisis were recruited. These consisted of doctors, nurses, paramedics, and supportive staff consisting of public health midwives, public health inspectors, pharmacists and speech therapists.

Mental health teams: In Sri Lanka, mental health services are delivered mainly through hospital-based multidisciplinary teams. Generally, such teams are led by a psychiatrist, and consists of medical officers, nurses, social workers, occupational therapists, psychologists, and supportive staff.

1926 Helpline staff: The National Institute of Mental Health (NIMH) coordinates a national mental health helpline for the Sri Lankan public [6]. It covers the whole country with the toll-free number "1926". The helpline staff mainly consists of a consultant psychiatrist, doctors currently working at NIMH, and well-trained nursing staff.

Suwa Seriya Mobile Emergency Services: The 1990 Suwa Seriya toll-free ambulance service provides island-wide, free pre-hospital emergency care to all the general public and acutely unwell patients with mental illness [7]. The staff consists of support staff and drivers who undergo training under the Health Ministry before recruitment.

Sample size and measures

An open survey was conducted by inviting health staff via emails, shared instant messaging groups, social media sites, and printed questionnaires available at their workstations. The participation was entirely voluntary. A self-administered structured questionnaire was used to assess for depressive and anxiety symptoms. A panel of experts, including consultant psychiatrists and mental health researchers, created the structured questionnaire. Questions were selected from several well-known psychometric tools validated for Sinhalese and Tamil languages, including WHO Wellbeing Index 5, Patient Health Questionnaire 9, and Depression Stress Anxiety Scale 21 [8-10]. Permission was taken from the authors/owners of each questionnaire. Psychological distress was only assessed in the frontline and mental health staff categories. Suggestions about improving services were sought from the helpline and emergency ambulance service categories.

Ethical issues

Permission for the study was obtained from the Director General of Health Services, all hospital directors of hospitals involved in the study and the heads of the hotline and ambulance service. Informed written consent was obtained from all participants. The data collection form was anonymised and no personal identification information was collected. Ethical review was not obtained as this is an open survey[11].

Data analysis

The prevalence of psychological symptoms was calculated using descriptive-analytical methods using SPSS(R) version 27 software. Structured open-ended questions regarding the experience of the situation and suggested improvements were asked, and answers were analysed using content analysis principles.

Results

The demographic data of the frontline healthcare staff and mental health teams are shown in Tables 1 and 2.

Frontline staff participants

The responders consisted of 188 frontline workers between the ages of 22 years to 59 years, and 59.2% were females. Of all, 40.8% were graduates, and 31.6% held a postgraduate degree. Doctors comprised 61% of the population (17.8% postgraduate trainees, 11.5% consultants, and 30.4% medical officers), 17.1% were nurses, 19.7% were paramedical staff, and only 2.1% were from supportive staff. There were people with work experience ranging from 1 month to 27 years. Among staff, 81.5% were married, and 63.6% had two or more children.

Many healthcare workers were experiencing work-related stress during COVID and post-COVID period. Of all, 64.9% feared transmitting COVID from work to their families and friends, while 44.8% feared acquiring COVID. Other considerable stressors were not being able to provide optimal care for the patients (50.5%), changes in household income (44.3%), transportation problems

(59.8%), and stress due to the status of the country in the post-COVID era (60.8%). Up to 42.5% experienced anxiety symptoms such as constant fear of impending danger, nervousness, and palpitations at least sometimes, but only 4.1% experienced them very often. Also, 12.8% experienced depressive symptoms fairly often or very often. An alarming rate of 4.1% of healthcare workers was having suicidal thoughts fairly of ten or very often.

Concerning support programs at work to help with psychological issues, 58.9% revealed that they do not have such programs at their workplace. Only 20% have accessed such programs at their workplace, and all have benefitted from them. Most positive responses regarding coping were about using religious activities, recreational activities like music, and talking to friends, family, and spouses were also frequently mentioned.

Table 1. Demographic data of frontline healthcare staff participants (n=188)

Occupation	*Designation*	*Number*	*Percentage*
Doctors	Consultants	22	11.5
	Senior registrars	18	9.4
	Registrars	16	8.3
	Medical officers	60	31.4
Nurses	Nursing sisters	1	0.5
	Nursing officers	29	15.1
Paramedical and Supplementary medical staff	Community psychiatry nurses	2	1
	Psychiatry social workers	3	1.5
	Public health midwives	13	6.8
	Public health inspectors	15	7.8
	Development officers	3	1.5
	Pharmacists	1	0.5
	Speech and language therapists	4	2
	School dental therapists	1	0.5

Years of experience	*Number*
<1 Year	2
1 - 5 Years	65
5+ - 10 Years	46
10+ - 20 Years	56
20+ - 30 Years	12
>30 Years	1

Educational level	*Number*	*Percentage*
Postgraduate	62	31.6
Graduate	80	40.8
Undergraduate	21	10.7
Passed A/L	32	16.3
Grade 8-11	1	0.5

Table 2. Demographic data of mental health team participants (n=70)

Place of work		*Occupation*		*Post*	
Teaching Hospitals	45	Doctors	54	Consultant	18
District General Hospitals	13			Senior registrar	12
Base Hospitals	10			Registrar	11
Divisional Units	2			Medical officer	13
		Nurses	13	Nursing officer	9
				Community psychiatry nurse	3
				Trainee nurse	1
		Other	03	Psychiatry social worker	3

Mental health team participants

Opinions were sought during June, and July 2022 and 70 responses were obtained. The responders from mental health teams fell between the ages of 28 to 59 years, and 61.4% were females. Most were working in the Western province (54.3%), and the rest were from the Eastern province (15.7%), Central province (12.9%), Southern province (7.1%), and North-central, North-western, and Sabaragamuwa provinces.

Out of all, 87% were delivering services in general psychiatry, 17.4% were in old age psychiatry, 13% in child and adolescent psychiatry, and 8.7% were in forensic psychiatry, representing all the subspecialties of psychiatry practised in Sri Lanka. While most were employed in teaching hospitals (64.3%), other hospitals were represented by district general hospitals (18.6%), base hospitals (14.3%), and divisional units (2.9%).

Out of all the responders, 79.1% were doctors (consultants 25.7%, medical officers 18.6%, senior registrars 17.1%, registrars 15.7%). Also, 19.4% were nurses (nursing officers 12.9%, community psychiatry nurses 4.3%, trainee nurses 1.4%), and 4.3% were psychiatry social workers.

Among the participants from mental health teams, 53.6% responded that they have sufficient facilities to treat acutely mentally ill COVID-positive patients. They reported that certain mental health issues increased in public obtaining services from them. Of these, depression ranked first (84.1% agreed), followed by anxiety disorders (69.6% agreed). Other illnesses which were shown to have increased were relationship problems (50.7% agreed), internet use disorders (50.7%), substance use disorders (49.3%), adjustment disorders (49.3%), and complicated grief (29%). Up to 17.4% of the responders have noticed a rise in post-traumatic stress disorder, and only 15.9% and 5.8% have noticed an increase in major psychiatric illnesses, such as bipolar affective disorder and schizophrenia. A small percentage of people have noticed other conditions on the rise, such as suicide, deliberate self-harm, isolation among children institutionalised due to COVID infection, obsessive-compulsive disorder, eating disorders, domestic violence, sexual abuse, and child abuse.

Many mental health team participants mentioned that the prevalence of depression, anxiety, and insomnia has significantly increased in the old-age population during the COVID pandemic. They reported that social isolation, fear of contracting COVID-19, being a medically vulnerable population to COVID-related deaths, and lack of access to psychiatric care have contributed to the above phenomena.

Regarding capacities, as high as 81.4% have noticed that resources allocated to mental health were diverted to provide acute medical care during the pandemic. During the same period and afterwards, 71.4% felt that they lacked infrastructure, while 54.3% realised that the staff's knowledge, skills, and attitudes were also suboptimal. The understanding of 51.4% was that the number of medical staff was insufficient, and 44.3% said there was a shortage of medications.

Another huge obstacle to care has been the low patient attendance to follow-up care compared to pre-COVID-19 times, as reported by 80%. On the other hand, 76.8% thought that the accessibility of services for acute mental health issues and relapses was also reduced. Reported contributory factors could be the lack of transportation facilities for the patients to reach health facilities even for acute care (84.4% agreed), fear of contracting COVID stopping patients from accessing such care (78.1%), and under-functioning services owing to the crisis (46.9%).

While 43.1% of mental health workers said they were short of medications, 66.2% have faced difficulties having no means of delivering medications to patients. Also, 64.6% could not contact the service users to arrange the delivery. Furthermore, many avenues of psychiatric management were affected during the COVID and post-COVID era. According to responders, psychotherapy work (81.4%), occupational therapy (80%), vocational training (80%), social services (84.2%), rehabilitation (80%), home depot programs, and home visits (71.4%) reduced in reach.

On reflecting on their patient management, 84.2% agreed or strongly agreed that they possess the necessary knowledge and attitude in mental health care, and almost the same number felt confident in helping frontline health workers psychologically. Despite this, only 70% were satisfied with the care given by them during these difficult times.

On stating specific improvements needed, 82.9% requested improved infrastructure, and 80% emphasised the need for training to enhance the knowledge and skills of the staff. Increasing medication availability and ensuring delivery methods were suggested by 70% and 65.7%, respectively. Further, 50.7% thought they would benefit from having more staff members.

1926 Helpline team participants

It was reported that the average number of calls the helpline receives per annum is 25000, and per month it stands at 1500. Out of them, staff follows up on about 800 calls monthly and hands over 160 calls on average to local mental health teams. Regarding human resources, one consultant psychiatrist, one trained medical officer, and eight trained nursing officers are assigned to the helpline.

Mental health problems most commonly encountered by the helpline staff were depressive symptoms (100% agreed), followed by anxiety symptoms (75% agreed), relationship problems (75% agreed), and sexual problems

(50%). Other common issues were substance use disorders and adjustment issues. Of the calls received from January 2021 to September 2021, 800 were related to COVID-19.

Among helpline participants, all of the staff members (100%) were satisfied with the service they delivered. The team felt the need for a training course in the Tamil language and training of more nursing staff working at NIMH. All staff members agreed that there should be more answering portals to enhance the service, and 80% pointed out the need for laptop computers to manage calls effectively. They also felt the need for technical equipment, specifically separate headsets for each recipient, to maximise the privacy and quality of care.

Suwa Seriya emergency service participants

According to participants, the Suwa Seriya team needs a well-developed training program that educates them on handling aggressive and uncooperative patients, including verbal de-escalation, physical restraint, rapid tranquillisation with medications, and ways of safe-guarding themselves. They should also understand the basic structure of mental health services in the country, whom to contact, and where to seek help. They further reported that the Suwa Seriya team would also benefit from basic knowledge of common psychiatric conditions and basic counselling skills.

Discussion

Many frontline healthcare workers are affected psychologically by COVID-19 and Post-COVID-19 era stressors, having anxiety and depressive symptoms mainly, while some are having suicidal ideation as well. Previous studies have found similar results [3,4]. This study reveals that Sri Lanka lacks structured support systems for healthcare workers having psychosocial problems. They mainly rely on accessing their informal support groups and other self-help methods. These methods are unlikely to detect serious mental illnesses. Recommendations to support the psychosocial wellbeing of the health care workers include developing a proper support system for the psychosocial wellbeing of frontline workers and improving accessibility by protecting confidentiality and privacy.

Mental health teams require support with essential medication to provide optimal care. An increase in focus on training and continuous professional development was identified, and the Sri Lanka College of Psychiatrists will attempt to bridge this training need with ongoing programmes [12].

When considering the 1926 mental health hotline, the following training and capacity development recommendations were deemed relevant. The training module should mainly address issues connected with depression, anxiety, relationship issues, substance use disorders, adjustment problems, and COVID-19-related issues. The service will also be benefitted by enhancing infrastructure, increasing the number of answering portals, providing laptops to receive more clients, and ensuring the quality of care through good communication equipment.

Concerning the 1990 Suwa Seriya ambulance service staff, the key recommendations are that a proper system should be developed which allows effective communication between different parties, including the patient and the family, community and hospital mental health teams, public health teams, Police, and Suwa Seriya itself. They should be provided training in common mental health emergencies, protocols and management pathways, and emergency contacts to link them with an on-call mental health team.

Conflict of interest

All authors declare that there is no conflict of interest.

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