COVID-19 AND CURATIVE HEALTHCARE WORKERS

"When you send a doctor in the COVID-19 ward, there should have been a week-long training with a psychologist, to explain them the situation, what will be their duties, the government has selected you, for this task, they should have been prepared and there is nothing to worry about, the mortality rate is very, and most people recover". *Health Service Provider, Sindh*

RESEARCH BRIEF

COVID-19 and Mental Health of Secondary- and Tertiary-Level Healthcare Workers: lessons from a large-scale inquiry in Sindh and Punjab Provinces of Pakistan

A. BACKGROUND

On a global scale, health service providers involved in the diagnosis, treatment, and care of patients with COVID-19 are under insurmountable psychological pressures. In Pakistan, as of January 2022, the virus has affected nearly 1.34 million people and accounted for more than 29,000 deaths, including health-care workers (HCWs). According to a systematic review, the pooled prevalence of depression, anxiety and post-traumatic stress disorders among HCWs across twenty-one (from low to high income) countries were observed around 22%. The prevalence of such mental health disorders vary according to sex, age and role of HCWs. Several factors are contributing to this psychological distress, such as emotional strain and physical exhaustion due to gruelling, unfamiliar and expanded workload, caring for critically ill co-workers, and intense fear of being infected due to shortages of personal protective equipment (PPE). Moreover, concerns about infecting family members, feeling of uncertainty, stigmatisation, and limited access to mental health services also aggravate the situation.

There is very limited evidence on the impact of COVID-19 on HCWs from low- and middle-income countries (LMICs). A few studies conducted in metropolitan cities of Pakistan showed very high prevalence of anxiety and depression. Dearth of qualitative studies, constraint in-depth understanding of health service providers' perspectives and experiences regarding the impact of COVID-19 on their mental health and how the health system is responding to prevent or alleviate this psychological impact. Evidence on health systems' preparedness in this regard is essential for development of context-specific mental health interventions to support the psychological health of the current health workforce. To fill this knowledge gap, this study is the first to systematically assess the mental health status of health workers and understand their challenges and needs across secondary- and tertiary-levels of public healthcare system.

TECHNICAL PARTNERS

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

THE AGA KHAN UNIVERSITY

IMPLEMENTING PARTNERS

HEALTH DEPARTMENT GOVERNMENT OF SINDH

Primary & Secondary Healthcare Department

Specialized Healthcare & Medical Education Department

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B. METHODS:

A mixed-method study was conducted during August - October 2020 across 23 districts of Sindh and Punjab provinces of Pakistan. We defined curative healthcare workers as those who are working at secondary and tertiary-level hospitals; they may or may not be directly involved in the provision of specialised curative services to COVID-19 patients or performing duties in coronavirus wards. From secondary- and tertiary-level hospitals, a representative sample of HCWs were selected including health service providers (doctor, nurse) and hospital managers/administrators.

Health facility	Survey	In-depth interviews
Tertiary-level (teaching hospitals)	268	20
Secondary-level (Taluka and District headquarter hospitals)	312	36

Owing to restricted mobility due to COVID-19, interviews were conducted telephonically by trained and specialist research staff using internationally validated instruments. Data collection took place in close collaboration with relevant provincial health departments of Sindh and Punjab. Ethical clearance was obtained from the National Bioethics Committee and the Ethics Review Committee of Aga Khan University.

C. CHARACTERISTICS OF STUDY PARTICIPANTS:

Overall, nearly half of the participants were female (45%), with an average of 5 years of professional experience. About three-fourths were physicians; reportedly one in every five HCW had been infected with COVID-19 (secondary: 18% and tertiary: 22%).

Profile	Secondary (n=312) %	Tertiary (n=268) %	Curative (n=580) %
Female	45	44	45
Experience in years: Mean (±SD)	5 (±6)	5 (±7)	5 (±6)
Medical doctor	70	82	76
Infected with COVID19	18	22	20
Providing direct COVID19 treatment	55	80	67

D. IMPACT OF COVID-19 ON PSYCHOSOCIAL AND MENTAL HEALTH OF HEALTHCARE WORKERS IN PAKISTAN

HCWs were prone to various environmental stresses such as lack of work control (51%), poor role definition (35%), high demand (33%), inadequate change communication by the organisation (31%), poor managerial support (30%), and poor relationship (27%). Substantive differences were observed between secondary and tertiary level health facilities in certain domains of work-related stress which was primarily in lack of control over work, inadequate managerial support and poor change communication by organisations.

Work-related stress	Secondary (n=312) %	Tertiary (n=268) %	Curative (n=580) %
Limited peer support[1]	27	29	28
High professional/ work Demands[2]	33	33	33
Lack of work control[3]	47	56	51
Inadequate managerial support[4]	28	34	30
Unclear role definition[5]	32	39	35
Inadequate change communication[6]	25	38	31
Substandard work practices[7]	26	28	27

Burnout	Secondary (n=312) %	Tertiary (n=268) %	Curative (n=580) %
Overall high burnout[8]	4	5	4
High exhaustion[9]	20	26	23

[1] Lack of encouragement and resources provision by the organisation colleagues
[2] Issues such as workload, work patterns and the working environment
[3] How much say the person has in the way they do their work
[4] Lack of encouragement and resources provision by the organisation line management
[5] Lack of people's understanding about their role within the organisation and whether the organisation ensures that the person does not have conflicting roles
[6] How organizational change is managed and communicated
[7] Lack of positive working practices to avoid conflict or deal with unacceptable behaviour
[8] Syndrome that result from chronic workplace stress, and is characterized by exhaustion, cynicism, and professional inadequacy
[9] Feeling of strain, particularly to chronic fatigue resulting from overtaxing work

Qualitative investigation indicates that due to the shortage of health workforce, the existing pool of health service providers had to bear the burden of extra clinical work. Their duty hours increased along with the number of shifts they had to do per week, which resulted in increased psychological distress among health service providers.

> *"Yes, some people have said that they are depressed...they are feeling burnt out and have motion sickness due to extra working hours".*
>
> *Health Manager, Punjab*

Since there were no proper counselling services from mental health professionals available, hospital managers counselled and encouraged health service providers. Although the managers were trying to support their staff, they lacked formal training in providing counselling. They motivated them via reinforcing health providers' professional and moral obligations, but it did not prove effective for most of the workers.

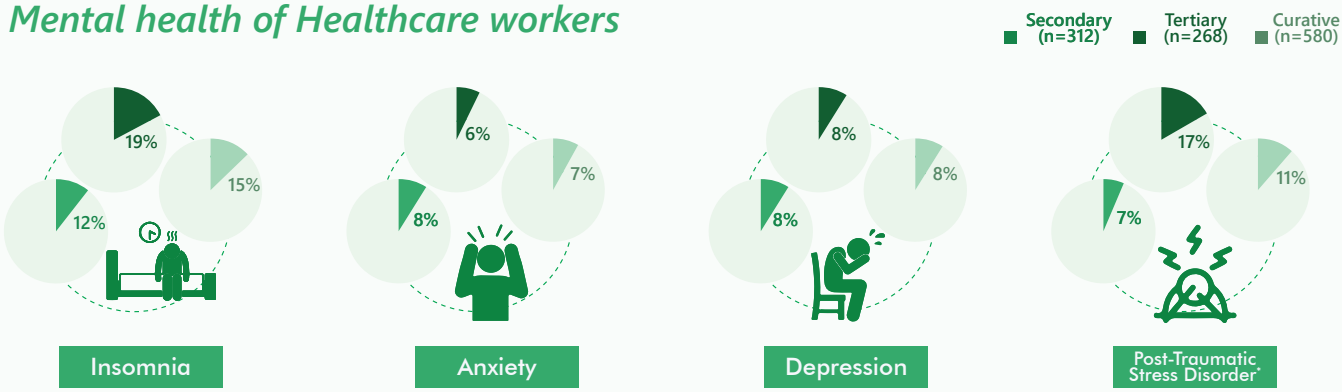
> *"I told them that we must serve humanity, and death is inevitable and I did whatever I could based on my knowledge and experience, regarding the moral values, whatever I could make them understand, some of them understood and most of them didn't".*
> *Hospital Manager, Sindh*

unfamiliarity of the virus – compounded with workers being inadequately equipped with the required knowledge about the disease and its consequences – put them under stressful condition.

> *"They (HCPs) were afraid for their families, stating that our parents are old and if we carry coronavirus from here then we might get them infected. Even if we don't show any symptoms, we could still get them or even our children infected. So this fear was also prevailing".*
> *Hospital Manager, Punjab*

The media was seen to exaggerate the magnitude of the situation and there was a bombardment of information. News regarding deaths of health workers due to COVID-19 was also creating

Mental health of Healthcare workers



Fear regarding COVID-19	Secondary (n=312) %	Tertiary (n=268) %	Curative (n=580) %
Scared about another COVID-19 outbreak in catchment area	61	56	58
Fear of being infected	50	49	49
Fear of infecting others	76	78	77

*An anxiety disorder caused by very stressful, frightening or distressing events

Overall only 4% of the HCWs reported high symptoms of burnout; they were mainly related to exhaustion (Secondary-level: 20% vs Tertiary-level: 26%). Experiences of anxiety and depression hovered around 7%-8% in both groups; however, PTSD was significantly higher among HCWs working in tertiary care health facilities as compared with their counterparts. Overall, about 15% of the HCWs were screened to have clinically significant insomnia (Secondary-level: 12% vs Tertiary-level: 19%). Even though the number of cases were low during data collection period, the fear of being infected and infecting others was considerably high – 50% and 77%, respectively. Nearly three in every five HCWs were reportedly scared of another COVID-19 outbreak.

Findings of the qualitative inquiry are complementary and revealed that health service providers were fearful about transmitting the infection to their parents and children. The novelty and panic among the majority of the HCWs. This was compounded with circulation of false information about the negative consequences for people testing positive for COVID-19, which was creating a lot of distress among health service providers.

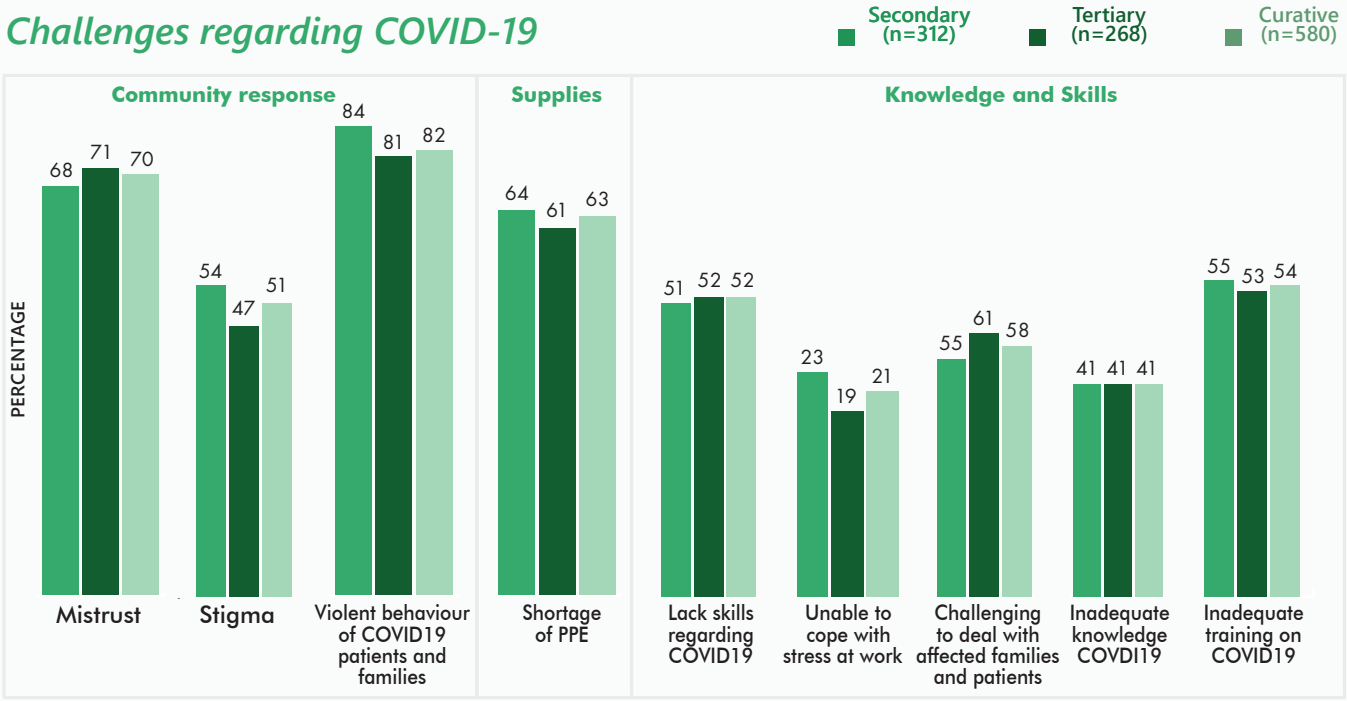
> *"If you take my personal opinion, the hype created regarding this is too much, and it had spread too much tension. That has bothered people a lot about what will happen, God forbid if somebody has corona then he will be taken away or this will happen or that will happen, etc. or because of me, my children will suffer".*
> *Hospital Manager, Punjab*

Health managers from only a few facilities reported that the government had arranged webinars for health service providers to help them manage psychological stress. However, the effectiveness of these trainings was quite low because many health workers had duties due to which they were unable to attend or sit through them.

E. PSYCHOSOCIAL AND MENTAL WELL-BEING NEEDS OF SECONDARY AND TERTIARY-LEVEL HEALTHCARE WORKERS TO SUSTAIN THEIR PERFORMANCE DURING COVID-19 PANDEMIC

HCWs encountered numerous challenges both in terms of limited support from the health system and from the community. About 2 in 5 reported having received inadequate training on COVID-19. As a result of which, they perceived to have insufficient knowledge and skills regarding the subject. More than half (58%) of them find it difficult to deal with COVID-19 patients and their families; about one-fifth cannot cope with stress at work during COVID-19 pandemic. Health service providers were of the view that health managers should be trained on basic counselling of staff and they should periodically discuss the concerns of health service providers that cause psychological distress among them. Furthermore, they should address the concerns of healthcare workers as well.

Challenges regarding COVID-19



> *"The administrator of the hospital should listen to the concerns of staff. He/She should arrange meetings with them to see if they face any mental pressure or not and if he/she has done so and identified the problems, then he should sort out these problems".*
>
> *Health Service Provider, Sindh.*

Shortage of personal protective equipment (PPE) (63%) were also faced during this pandemic crisis. According to health service provider treating COVID-19 positive or suspected cases without PPE was escalating their fear of getting infected. Managers themselves were helpless due to lack of availability of PPE in the market and ended up buying masks and other protective equipment for the staff themselves. Mistrust from the community (70%), stigmatisation (51%) and uncooperative violent behaviour of patients and families about COVID-19 (82%) were the main community/patient-related challenges. This mistrust and stigmatization was also causing fear among a lot of the health service providers posted in COVID-19 wards as they felt isolated from other people.

> *"Health workers were hospital-bound and were afraid of living alone and being cut off from their families. They also felt the stigma from the people around them".*
>
> *Hospital Manager, Sindh*

Health service providers also highlighted the need for extra rest periods, so that they could get enough time to recuperate from the exhaustive routine and then come back to work. A common strategy employed by the health managers was to give short leaves to the health service providers most affected by the COVID-19 stress. These leaves helped the staff in regaining their mental and physical strength to work. Health service providers and health managers highlighted the need for counselling services from mental health professionals to reduce stress and anxiety that HCWs were experiencing because of working under pressure to provide care to COVID-19 patients.

> *"All hospitals should at least provide one-to-one ...counselling sessions...to reduce staff anxiety and stress".*
>
> *Health Service Provider, Sindh*

F. CONCLUSION:

The study revealed that HCWs had immense fear of acquiring infection and transmitting it to their family members, accompanied by fear of social isolation and stigma. Poor availability of personal protective equipment (PPE) and excessive workload also put them under stress and they were also suffering from anxiety due to uncertainty around COVID-19; media exaggeration regarding this uncertainty added to their stress. In terms of their psychological health needs, they identified provision of counselling services and safe working conditions, paid leaves and timely release of their salaries along with appreciation and motivation to work in pandemic crisis. Furthermore, in order to address their mental health needs in the future, they suggested provision of professional mental health services, conducting formal training of health managers on managing mental health needs and anticipating the mental health needs of the health workforce.

G. KEY RECOMMENDATIONS:

To address the mental health needs of HCWs, timely comprehensive support should be provided that should include:

- **Psychosocial support:** Establish call centres to provide mental health support to health staff. Moreover, health managers should be trained to provide direct support to the staff during such stressful times.
- **Informational support:** A clear communication and command strategy for the health facility during pandemic and other emergency situations.
- **Instrumental support:** Timely provision of updated treatment protocols, PPE and medical supplies.
- **Organisational support:** Recognition of personal and professional needs of staff, serving during pandemics, disasters and other emergencies i.e. periodic need assessment and monetary incentives/risk allowances and appreciation letters

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