

Abstract

Background

Healthcare workers (HCWs) have been at the forefront of the COVID-19 pandemic response. However, little attention has been paid towards investigating the impact of COVID-19 on HCWs' mental and psychosocial wellbeing. The aim of this study was to investigate the impact of Covid-19 on the mental health of doctors working in government hospitals in Zimbabwe. It seeks to identify opportunities and gaps in mental healthcare provision and access for healthcare workers to inform policy and practice.

Study design

Qualitative interviews with medical practitioners working at two government hospitals in Harare providing medical care to COVID-19 patients were conducted. Purposeful and snowballing sampling methods were used to select participants to the interviews. Qualitative content analysis was used for the data analysis.

Results

Five categories emerged in this study that reflected the experiences and challenges encountered by HCWs with regards to mental health and psychosocial support. Feelings of discrimination and isolation, stressful working environment, health system related challenges, varying coping mechanisms and barriers to accessing mental health services.

Conclusions

The study revealed a complex interaction of individual up to health system-related factors that influence the mental and psychosocial well-being of HCWs responding to Covid-19. Policymakers, health institutions and health related organisations must institute an array of supportive interventions to ameliorate the existing gaps in accessing mental health and psychosocial support to HCWs in Zimbabwe.

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Abbreviations

COVID-19	Corona Virus Disease of 2019
HCWs	Health Care Workers (HCWs)
GDP	Gross Domestic Product (GDP)
MHPSS	Mental Health and Psychosocial Support (MHPSS)
MoHCC	Ministry of Health and Child Care (MoHCC),
PPE	Personal Protective Equipment (PPE)
PHEIC	Public Health Emergency of International Concern (PHEIC)
WHO	World Health Organization (WHO)
SARS	Severe Acute Respiratory Syndrome (SARS)

Introduction

Background

COVID-19 has posed an unprecedented threat to global health and has been designated as a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) since the 30th of January 2020. While it was possible for the rest of the population to adapt and adjust their working routines through working from home or downsizing operations, HCWs remained in their workstations and responding to this global pandemic from the forefront. This has also been previously attributed to health workers experiencing immense physical and psychological pressure [1].

The mental health impact of COVID-19 has always been expected to be huge in society due to the nature of the disease and the various coping mechanisms that come along with it. However, these mental health challenges are expected to affect health workers more than the general population [2]. HCWs are already predisposed to mental health conditions, and there is evidence from literature of increased mental and psychological stress within HCWs during outbreaks of infectious diseases [3]. For example, frontline and non-frontline health workers who responded to the Ebola virus outbreak in Africa [4] and those who responded to the Severe Acute Respiratory Syndrome (SARS) in Hong Kong and Beijing experienced varying symptoms of psychological disorders [5]. Likewise, reports of mental health challenges have been reported during the current COVID-19 pandemic [6-8].

The COVID-19 pandemic has certain unique features which increase its potential to negatively affect the mental health of HCWs.

Firstly, depletion of personal protective equipment (PPE) and uncertainty over quality and supply of PPE puts healthcare workers in constant fear of contracting the virus and thus impacting their mental health [9]. In Zimbabwe, for example, HCWs had to go on industrial action over shortage of PPE, [10] and a High Court order was granted compelling the government to provide constant supply of PPE [11].

Secondly, the increase in cases of COVID-19 within HCWs, deaths of health care workers and the media reporting of such deaths has instilled fear in other HCWs and has likely amplified the negative effects of COVID-19 on their mental health [12].

Thirdly, the overwhelming overload, redeployment to COVID-19 units, also known as red zones, attending to critically ill patients and having to watch people dying daily also plays a part in affecting the mental health of HCWs [13].

Lastly, having to adapt to lifestyle changes that were introduced control the spread of COVID-19, including but not limited to lockdowns, wearing of masks, increase in hand hygiene, has been associated with increase in mental health problems among the general population and hence health workers are likely to be affected in the same way as well [14].

Although there is enough evidence on the mental health challenges faced by HCWs across the globe, little attention has been paid to HCWs in resource-limited settings such as Zimbabwe. In these settings, mental health initiatives targeting health workers are not prioritised and the healthcare system is unable to effectively help the frontline health workers. For example, in Mashonaland Central province of Zimbabwe, over 50 nurses resigned from their posts within the first three months of the pandemic as a result of fear, anxiety and physiological distress [15].

Mental Health Context

Zimbabwe suffers from a shortage of mental health workers. With only 18 psychiatrists and about 917 mental health nurses (6.5 per 100 000), six clinical psychologists, 10 occupational therapists and 13 clinical social workers covering the entire country, the labour force gap is huge [16]. As a result, there is high patient to staff ratio across all government medical facilities of approximately 7 nurses per 100 000 people [17]. There are also very few mental health facilities in Zimbabwe. There are only 11 mental health facilities across the entire country. Several facilities are no longer functional due to inadequate resources or various reasons such as inability to maintain existing infrastructure [17].

Table 1: Human Resources for Mental Health

			Rate per # 100,000
Generalist	Doctor*	2,245	16
	Nurse*	10,102	72
	Pharmacist	n/s	n/s
	Neurologist	4	0.03
Specialist	Psychiatrist	18	0.1
	Psychologist	6	0.04
	Psychiatric nurse	917	6.5
	MH social worker	13	0.09

Source: WHO (2020)

Table 2: Health Facilities for Mental Health

		Total Facilities	Facilities/ 100,000	Total Beds	Beds/ 100,000
Inpatient	Mental hospital ²²	2	0.01	1,614	11.5
	General hospital psychiatric unit	2	0.01	142	1.01
	Forensic unit	2	0.01	195	1.4
	Residential care facility ²³	10	0.07	72	0.5
	Child/adolescent facility	<i>n/s</i>	<i>n/s</i>	<i>n/s</i>	<i>n/s</i>
Outpatient	Hospital mental health	7	0.05	<i>n/a</i>	<i>n/a</i>
	Community-based /non-hospital mental health	<i>n/s</i>	<i>n/s</i>	<i>n/a</i>	<i>n/a</i>
	Alcohol/drug/other facility	1	<i>n/s</i>	<i>n/a</i>	<i>n/a</i>
	Child/adolescent	2	<i>n/s</i>	<i>n/a</i>	<i>n/a</i>
	Other facilities	<i>n/s</i>	<i>n/s</i>	<i>n/a</i>	<i>n/a</i>

Source: WHO (2020)

The MoHCC data also show that there are insufficient mental health drugs across the entire country. Most units were observed to have between one to three months stock of drugs such as first-generation antipsychotics limited stocks of antidepressants and mood stabilisers [18].

Some of the most common mental health disorders in Zimbabwe are shown below:

Table 3: Prevalence and treatment coverage of priority mental disorders

		Prevalence (UI)		Total (UI)	Treated	
Schizophrenia	Overall	0.1%	(0.1%-0.1%)	17,454	(15,124-20,028)	n/s
	Female	0.1%	(0.1%-0.1%)	9,326	(8,048-10,835)	n/s
	Male	0.1%	(0.1%-0.1%)	8,128	(7,036-9,314)	n/s
	Young adults (20-29)	0.2%	(0.1%-0.2%)	4,034	(2,962-5,356)	n/s
	Older age (70+)	0.1%	(0.1%-0.2%)	350	(300-404)	n/s
Bipolar Disorder	Overall	0.5%	(0.5%-0.7%)	77,449	(65,701-92,630)	n/s
	Female	0.6%	(0.5%-0.7%)	42,353	(35,728-50,543)	n/s
	Male	0.5%	(0.4%-0.6%)	35,096	(29,414-42,189)	n/s
	Young adults (20-29)	0.9%	(0.7%-1.1%)	20,946	(16,077-27,075)	n/s
	Older age (70+)	0.5%	(0.4%-0.6%)	1,362	(1,129-1,631)	n/s
MDD	Overall	1.5%	(1.4%-1.7%)	218,167	(194,379-245,030)	n/s
	Female	1.8%	(1.5%-2.0%)	129,558	(114,593-146,286)	n/s
	Male	1.3%	(1.2%-1.5%)	88,610	(78,598-99,973)	n/s
	Young adults (20-29)	1.8%	(1.4%-2.4%)	44,973	(33,455-59,576)	n/s
	Older age (70+)	5.5%	(4.6%-6.6%)	14,516	(12,099-17,176)	n/s
Epilepsy	Overall	0.3%	(0.1%-0.6%)	48,355	(11,927-86,493)	n/s
	Female	0.3%	(0.1%-0.6%)	24,620	(6,129-44,110)	n/s
	Male	0.4%	(0.1%-0.6%)	23,735	(5,789-42,607)	n/s
	Young adults (20-29)	0.4%	(0.1%-0.6%)	8,739	(2,179-15,680)	n/s
	Older age (70+)	0.6%	(0.1%-1.1%)	1,496	(380-2,799)	n/s
Alcohol use	Overall	1.3%	(1.1%-1.6%)	189,731	(161,950-223,328)	n/s
	Female	1.0%	(0.8%-1.1%)	71,556	(60,405-84,855)	n/s
	Male	1.8%	(1.5%-2.1%)	118,175	(99,982-137,534)	n/s
	Young adults (20-29)	3.0%	(2.2%-4.0%)	73,794	(54,343-97,527)	n/s
	Older age (70+)	0.9%	(0.7%-1.1%)	2,264	(1,840-2,781)	n/s
Drug use	Overall	0.7%	(0.6%-0.9%)	105,296	(89,641-123,703)	n/s
	Female	0.6%	(0.5%-0.8%)	48,096	(39,259-58,996)	n/s
	Male	0.9%	(0.7%-1.0%)	57,200	(48,304-67,141)	n/s
	Young adults (20-29)	1.9%	(1.5%-2.4%)	46,927	(37,376-58,802)	n/s
	Older age (70+)	0.2%	(0.2%-0.3%)	645	(495-808)	n/s
Suicide deaths*	Overall	18.0	(14.7-21.4)	2,647	(2,160-3,142)	n/s
	Female	9.7	(7.6-12.5)	742	(578-958)	n/s
	Male	26.9	(19.7-33.9)	1,905	(1,394-2,398)	n/s
	Young adults (20-29)	21.9	(15.4-30.2)	544	(383-751)	n/s
	Older age (70+)	84.4	(57.9-104.2)	221	(152-273)	n/s

*suicide rate is reported as number of suicides per 100,000 population

Source: WHO (2020)

The Mental Health Act of 1996 and mental health regulations of 1999 provide guidelines that inform the mental health framework in Zimbabwe. These regulations have not been recently updated, with calls for their updating growing louder. To enhance mental health interventions, the government of Zimbabwe has come up with a National Mental Health Policy and a strategic plan.

Under the policy framework, mental health is classified as a fundamental human right and promotes the provision of quality and professional services and ethical treatment of patients. It emphasises the need to decentralise and integrate services to make them accessible and sustainable through employing a multidisciplinary and multi-sectoral approach to mental health. Further, it recognises the importance of

“community involvement, empowerment, partnership and collaboration with local and international partners” [19].

The National Mental Health Strategic Plan, running from 2019 to 2023, has set targets to improve mental care in Zimbabwe by enhancing:

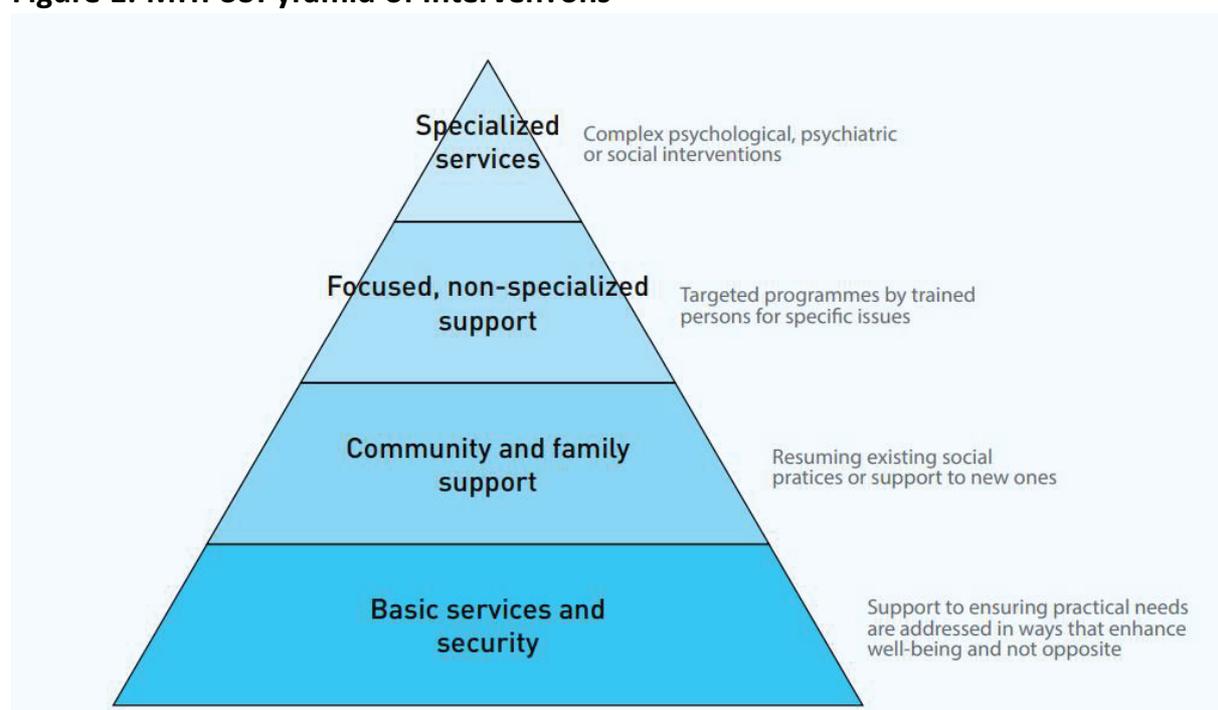
“the quality of mental health service delivery and patient care in line with international best practice; improving mental health awareness and empowering communities; promoting research and development of locally relevant, innovative solutions to challenges in the mental health system; reviewing legislation in line with current international guidelines and strengthening human resources through training and skills development” [19].

Analytical Framework

Mental Health and Psycho-Social Support Framework

The Mental Health and Psychosocial Support (MHPSS) framework was applied [20] as the theoretical framework to assess the different range of psychosocial support services that could be explored with regards to the mental health of medical practitioners responding to COVID-19. This theoretical framework also helped to guide the analysis on the different levels of support and coping strategies used by the participants as they respond to COVID-19.

Figure 1: MHPSS Pyramid of Interventions



At the base of the pyramid encompasses activities that affect mental health into sectors such as health, education and protection that should be available to the affected population as much as possible. The second layer deals with positive aspects such as mental health and psycho-social well-being and prevention activities targeted at individuals, groups and families.

The third floor relates to prevention and treatment activities for those unwell with mental illness and those vulnerable to developing mental health conditions. The top of the pyramid speaks to provision of clinical care and treatment to chronic patients and those suffering distress and facing difficulties to cope. As you go up the pyramid, the level of formal training and supervision needed to provide safe and effective care, treatment, and support increases [21].

WHO's Department of Mental Health and Substance Use advocates for governments to put in place measures to increase resilience of health workers and for supervisors to actively show commitment to safeguard the mental health of health workers [22]. Such interventions need to be supported with evidence on the mental health profiles of health workers, and the observed gaps in the existing (if any) psychological support structures. However, there is paucity of such data within the Zimbabwean context and Sub-Saharan Africa in general. It is, therefore, important to understand the psychological needs of Zimbabwean HCWs, so that interventions can be tailored to mitigate the negative effects of the Covid-19 pandemic.

This study, therefore, aims to:

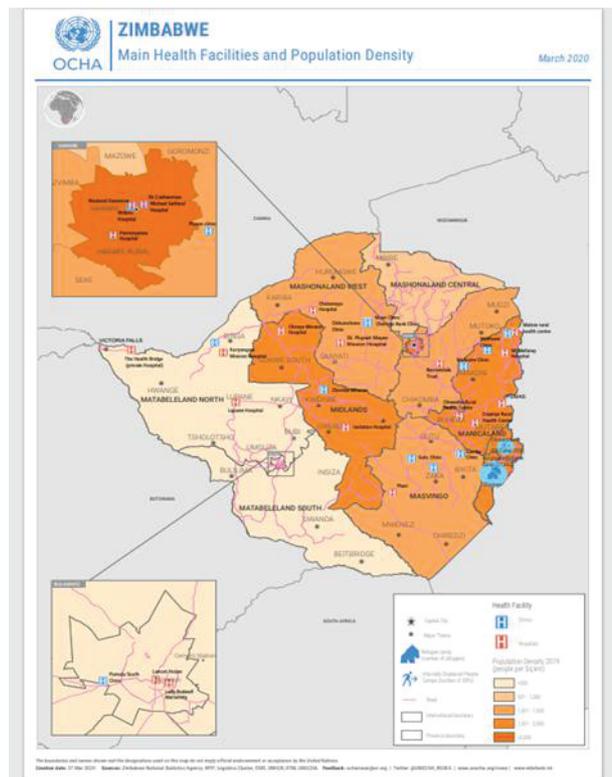
- a) Explore the experiences of doctors working on the frontline responding to COVID-19 in Zimbabwe.
- b) Identify existing support structures, strategies and resources used by health workers to support their mental health
- c) Provide recommendations on interventions needed to reduce the negative mental health consequences on frontline healthcare workers responding to COVID-19 in Zimbabwe

Methodology

Study se?ng

The study was conducted in Zimbabwe's capital city Harare, a low-income country located in southern Africa with an estimated population of 14,86 million, Gross Domestic Product (GDP) of US\$16,77 billion and a life expectancy at birth of 61 years [23]. Zimbabwe has 16 official languages although the three dominant ones are English, Shona and Ndebele. Most health workers are conversant with the English language as it is the official language for teaching at university and the medical school. The human resources for health landscape in Zimbabwe is characterized by high levels of migration, heavy workloads as most health care facilities are understaffed, low salaries, persistent strikes, and low levels of motivation among health sector cadres among others [23].

Figure 2: Main Health Facili?es in Zimbabwe



Source: OCHA

The challenges in the health sector in Zimbabwe have also been previously attributed to the gaps in health care financing. The budgetary allocations to the health system have been persistently below the 15% target outlined in the Abuja

Declaration. Furthermore, less than 10% of the population is covered by health insurance and the proportion of out-of-pocket expenditure as compared to the overall health care spending is estimated at almost 40% [24].

Harare has an estimated population of 2 000 000 individuals [25] and the health facility density is 0.2 health facilities per 10 000 people (compared to a national average of 1.1 per 10 000 people) according to the National Health Strategy (NHS 2021-2025) [26]. There are no district hospitals in Harare, except for the recently expanded Mabvuku Polyclinic, resulting in many patients with medical conditions that require secondary care being referred directly to the three quaternary hospitals in Harare province. To a larger extent, this has contributed to the overcrowding and inefficiencies at the quaternary level hospitals, which ideally must be reserved for care [27].

As of the 11th of November 2021, the total cumulative number of COVID-19 cases was 133 329, 4 694 Covid-19 related deaths and 404 active COVID-19 cases. Harare was the most affected province, with a total cumulative 26 054 confirmed COVID-19 cases, 1 517 deaths and 16 active cases [28]. Although these statistics point towards a subsiding third wave of COVID-19 in Zimbabwe, the experiences narrated by the medical practitioners in this study dates back from March 2020, when the first case of COVID-19 was detected in Zimbabwe. During the early stages of the pandemic, the response to COVID-19 was chaotic, by panic, limited testing capabilities and very few health centres specialized to provide care to COVID-19 patients.

Data collection methods

Key informant interviews were conducted with 10 medical doctors working in government hospitals in Harare. All the 10 participants obtained their first medical degree from the University of Zimbabwe, located in Harare, and had also successfully completed their medical internship in Zimbabwe. Eight of the participants were currently practicing as general practitioners and the remaining two specialized in psychiatry and public health. Two types of purposive sampling were done to identify study participants; snow balling or chain sampling and homogeneous sampling. The initial study participants helped identify the next interviewees and only medical practitioners, with experience attending to COVID-19 patients in government hospitals, were recruited into the study. The later sampling method was chosen to

ensure simplification of the analysis. The participants were recruited into the study until the further enrolling of new participants was not adding any new information, i.e., the point of saturation has been reached. Selecting study participants until saturation has been argued by several scholars as the ideal way of determining sample size in most qualitative research studies [29].

A structured qualitative research interview guide was developed by the research team, with several iterations done to ensure they key themes to be explored in the study were addressed and follow up probes were also included. The interviews were conducted virtually to protect the participants and the research team from COVID-19, with all the zoom sessions being recorded to ensure adequate capturing of the elicited responses. A qualified researcher with expertise in qualitative research and social sciences took the lead in the interviews and was supported by a public health scientist to conduct the interviews. Most of the interviews were conducted during the peak of the third COVID-19 wave in Zimbabwe.

The study participants were encouraged to use their own words as much as possible, and the interviewer used a variety of questioning techniques to ensure maximum elicitation of the participants' experiences on the topic. The questions were open-ended to allow the participants to adequately express their views. A variety of questions focusing on the medical practitioners' experiences, knowledge, feelings, and opinions were used to ensure a wide range of responses are obtained during the interviews.

The researchers were also aware of the sensitivity in questioning participants on their mental health issues. The interviews were purposively designed in a way that sensitive questions would be asked in the later stages of the interviews. All recorded interviews were transcribed, with both the recordings and the transcripts stored securely in dropbox, after removing any identifying information that could be traced to the participants.

Data Analysis

Qualitative content analysis was used to analyse the data using the method described by Graneheim and Lundman [30], with two members of the research team conducting the analysis separately and then building consensus on their findings, meaning units and condensed meaning units were identified from the data in the first

stages. Codes were then identified from the condensed meaning units and the codes were grouped into categories. The codes were grouped into categories that were internally homogeneous and externally heterogeneous, to allow distinction between the categories and to find common themes within the categories. Sub themes were also derived from the categories. Both NVivo and in vivo codes were used, with both manifest and latent content expressed in the codes and themes respectively. OpenCode 24 was used to organise the data during the quantitative content analysis.

Trustworthiness

The quality of qualitative research is determined by the level of meticulous and rigorous processes undertaken to reach an honest conclusion. Graneheim and Lundman posit that trustworthiness in qualitative research is assessed using four criteria, namely dependability, credibility, transferability and confirmability [31]. Confirmability for this research was realized through interviewing doctors with different skills sets, varying experiences of working on the frontline and in different work environments. Dependability was achieved through conducting interviews until we reached saturation levels, where the interviews were no longer bringing out new information. To confirm the results, the data was analyzed by three co-authors separately to eliminate bias and quotations were used to illustrate the respondents' perspectives. The study context, setting and methodology were clearly explained to ensure transferability of the study.

Ethical Considerations

All participants voluntarily entered into the study after the overall purpose of the study was explained to them. A written consent form was also signed prior to each interview. The participants were informed of their right to withdraw from the study at any point in time and guaranteed that this would not affect their participation in any future studies. The research team also explained in detail the key features of the research design, and how the elicited data would be stored confidentially, analyzed and shared in a manner that de-identifies all the participants. Possible risks and benefits of participating in the study were explained, and mechanisms were put in place to refer participants who may need further psychosocial support.

RESULTS

Five important categories emerged from the study, highlighting the experiences and challenges on the mental health of health care workers issues related to the COVID-19 pandemic.

Firstly, HCWs had feelings of discrimination and isolation, emanating from perceptions or how they were viewed by family, friends and communities as high-risk transmitters of COVID-19.

Secondly, the COVID-19 pandemic contributed to a stressful work environment, with work overload and limited resting times. This led to burnout, fatigue, stress and depression among the health workers.

Thirdly, there were many challenges in the health system such as lack of PPE, sundries and consumables, limited availability of human resources for health among others that exacerbated the plight of the health care workers.

Another category that emerged from the data is the varying mechanisms in which HCWs used to cope when they have mental health issues. The key observation was that the limited availability of formal or institutionalised mechanisms to help health workers cope with the burden of COVID-19 resulted in health workers leveraging on family and societal support, while others resorted to harmful practices such as substance abuse.

Finally, several barriers were also identified as being inhibitory towards the access and utilisation of mental health services by health care workers. These ranged from individual, institutional and policy level barriers.

The results are explained in detail below and the table highlights the process that was used to generate the categories from the meaning units that were extracted from the interviews.

Table 4: Some examples of selected meaning unit, condensed meaning units, codes and categories that emerged in the study

Meaning Unit	Condensed Meaning unit	Codes	Category
“We faced stigma from our own colleagues. In the beginning, other doctors didn’t want to meet us even in the corridors because we were working in the red zone. It was difficult mixing with others”.	We faced stigma from our own colleagues from other doctors.	Lose support with peers	Feelings of discrimination and isolation
“Mental health hasn’t been something we think about. We are all worried about our physical health so it’s something that I push aside’. I have never seen a therapist, a psychologist”.	<ul style="list-style-type: none"> We are all worried about our physical health so it’s something that I push aside. I have never seen a therapist, a psychologist. 	Lack of importance attached to mental health	Barriers to accessing mental health services

1. Feelings of discrimination and isolation

The study findings highlighted the existential pervasive discrimination towards health workers responding to COVID-19 from a wide range of social actors. The discrimination was observed at work, among family and friends and in the community. For instance, respondents who worked in the COVID-19 Red Zone highlighted that they were discriminated against by their fellow workmates. They reported incidences where colleagues working in the less risky green zone were not comfortable associating or sharing hospital equipment with them. They noted that some of their colleagues would avoid them even after work for fear that they would transmit the

virus. This affected their social life and caused them mental distress since their social network is mainly composed of people working in the health sector. One of the respondents highlighted this workplace discrimination in the following way:

“They would ask you, so where are you taking this machine and the moment you mention that it’s for the COVID-19 Ward, colleagues would give you the attitude that you are supposed to stay in the red zone and not come to the green zone”.

The discrimination was related to their high-risk environments, which led to social isolation as they were potential sources of COVID-19 transmission. The respondents considered this isolation as detrimental to their mental health and affected their work performance.

Some of the respondents reported to having suffered discrimination from family and friends who feared they would transmit COVID-19. According to the interviewed health workers, this discrimination was worse at the beginning of the pandemic and during the peak of the subsequent COVID-19 waves. One respondent who attended to one of the earliest COVID-19 cases in Zimbabwe confessed that he was not able to disclose his involvement to family and friends due to fear of discrimination.

Although some respondents reported discrimination from family members who feared contracting COVID-19, most respondents mentioned that their families were very supportive. Implementing strict infection and prevention protocols at home to protect family members was identified as some of the strategies used by health workers to minimise exposing family members to COVID-19 at home. The family network was also identified as a critical pillar for psychosocial support. For example, some respondents highlighted that when they felt isolated from their social circles, they would get comfort from their families.

Most of the respondents admitted having tried to isolate themselves from family and friends as a way of protecting them. Some respondents avoided their parents at high risk, especially those above 65 years and those with co-morbidities for fear that they would infect them. The respondents confessed that it was difficult to stay away from their parents, but knew that it was in their best interest to protect them. One respondent had to move his wife who had recently given birth as a way of protecting the mother and the baby. The respondents noted that this separation from their loved ones and the hectic work on the frontline took a toll on their mental health.

2. Stressful working environment

The environment at the workplace was also identified as a possible stressor among health workers responding to COVID-19. The work environment was described as uncondusive due to heavy workloads leading to burnout and fatigue and characterised with abnormal working hours. During the peak of the COVID-19 waves, and as a result of the limited numbers of health workers in most health centres responding to COVID-19, there was limited or no time for rest or to take the contractually provided off-days. On many occasions, medical doctors were left to do some work that they are normally not supposed to, which added onto their workload. Some noted that in circumstances when it was busy at night, they would sleep in the afternoon, which also affected their sleeping patterns. One of the interviewees had this to say:

“We couldn’t knock off during the waves. The waves really hit us hard, sometimes you come in the morning and leave at night. You cannot afford to take breaks in-between because there is too much to be done and too many patients to be seen”.

The nature of the boss-subordinate work relationship at the health institution level also played a pivotal role in shaping the work environment. Unhealthy work relationships with superiors were cited by the interviewees as contributing to the poor work environment that contributed to stress and anxiety among health workers responding to COVID-19. For example, there was a detest to autocratic or directive styles of leadership as the health workers preferred a more collaborative approach, where they could actively contribute to the decision-making process in the COVID-19 wards.

Though insufficient, it was revealed that incentives played a role in boosting the morale of health workers responding to COVID-19. Some of the noted incentives include the provision of a specific COVID-19 allowance, food hampers, airtime and on-call allowance, among others. Besides supplementing their income, the incentives also served as an appreciation to the risky work health workers are taking as they provide care to COVID-19 patients. Incentives thus played a critical role in providing a supportive work environment for the frontline health worker.

Another identified stressor among health workers was the limited availability of COVID-19 testing facilities for health workers at the workplace. Some respondents

highlighted moments of anxiety as they worked with colleagues who were not aware of their COVID-19 status. This unavailability of testing for COVID-19 resulted in distrust, obtrusive thoughts or fear of being infected with COVID-19 from their work colleagues and hence an unhealthy work environment.

3. Health system-related challenges

The absence of designated units within health facilities, where health workers can turn into and seek mental health and psychosocial support, contributed immensely to exacerbating the plight of frontline health workers responding to COVID-19. These health service delivery institutional barriers were reported by the interviewees, with many resorting to non-institutional alternative means of psychosocial support. The respondents reported that they mainly relied on peer-to-peer support whenever they required mental health support.

At the beginning of the pandemic, it was difficult for most doctors to report for work due to concerns about their safety. The unavailability of PPE was of major concern and posed a huge risk for contracting the COVID-19 virus. This lack of adequate PPE was also extensively covered in the media and made the health workers more worried and fear contracting COVID19. In addition to the shortages of PPE, there was also limited availability of hospital consumables such as testing kits, reagents, and cleaning materials.

This unavailability of medical sundries which are crucial to the effective and safe discharging of duties by health workers posed a strenuous work environment emanating from deficits in the health system. The interviewed health workers linked these negative health system factors to increased anxiety, stress and depression among them and their work peers. One interviewee was worried about the possibility of dying if he was to contract COVID-19 at the workplace due to unavailability of PPE and said the following;

“I told myself if I am to die then so be it. I have no control over my destiny, but I will do what I can to safeguard my mental health”.

The inability to meet patients and their relatives' expectations caused by the lack of essential resources such as equipment and consumables was also cited as contributory to feelings of guilt and stress among health workers. Some of the interviewed health workers were engulfed with feelings of helplessness as they

would watch their patients deteriorate or even die as they could not create additional intensive care beds or provide basic consumables such as oxygen. In most instances, tough decisions such as deciding which patient to prioritise for intensive care support had to be made by the health workers. Unfortunately, in these incidences, the health practitioner had to make a difficult decision which had huge bearings on patient outcomes, depressing them in the process and leaving them to endure feelings of guilt. One health worker was distressed by this and had to say:

“Telling people who are very sick that you can’t help them and sending them home was daunting”.

Another respondent also explained a situation in which he had to choose between a young man and an elderly man who all required a high flow oxygen machine. Respondents said such situations had significant negative impact on their mental health.

Most health facilities did not have existing policies or guidelines that spell out what health workers should do when in need of mental health services and psychosocial support. This was further compounded by the existing work culture where supervisors do not talk about mental health and psychosocial support.

Furthermore, it was highlighted that hospital authorities had to set up a clinic after a surge in COVID-19 cases among healthcare workers, although it was mainly for COVID-19 treatment and did not provide mental health support and services. In most cases, it was left to the individual health worker’s discretion to seek mental health care when they felt they have need. No routine screening mechanisms were in place to help identify, refer and link to care those health practitioners in need for mental health and psychosocial support. A health worker working at one of the main hospitals providing Covid-19 care had this to say:

“There is nothing like that. The only time I was screened (for mental health) was for research purposes”.

Finally, on health system-related challenges, the human resources for health situation also compounded the difficult situation faced by frontline health workers responding to COVID-19. Staff shortages resulted in increased workload, poor service delivery and negative psychosocial impacts on health care workers. The staff

shortages meant doctors had much more work than they normally do. For example, one doctor had this to say;

“Shortage of staff meant we had to do more than we signed for. You are almost everything not just a GP”.

4. Varying coping mechanisms

On being asked how they deal with mental health-related issues such as stress, depression and anxiety, there were varying responses. These included leveraging on existing family and social networks through talking to family and friends. Other respondents found it therapeutic to engage in exercise, travel, read books or play games as a way of getting their minds off the pressures at work.

However, some practitioners had to resort to harmful tendencies such as drinking alcohol excessively. As highlighted previously, the unavailability of mental health services at institutional level also contributed to the health workers utilising these non-formal coping strategies when they felt stressed, depressed or as having anxiety.

5. Barriers to accessing mental health services

Several barriers to accessing mental health services were noted during the interviews and these ranged from individual factors up to institutional and policy level barriers. At the individual level, poor health seeking behaviours amongst the health practitioners was identified and explored. Most doctors attributed their poor utilisation of mental health services to failures in recognising when they needed mental health support. To highlight the poor health seeking behaviours one participant had this to say:

“There is need to make it normal that it’s okay to seek help when you’re unwell”.

Others also pointed out to the stigma and discrimination that is associated with mental health as a possible push factor that limits HCWs from seeking care. They argued that mental health is associated with psychosis and they would not want to be seen as having psychotic disorders. The available mental health facilities are also usually overcrowded and associated with poor service delivery thus most health workers shunned these facilities.

Another barrier to poor uptake of mental health services was lack of information and awareness on mental health, not only at the institutional level, but also at the

national level. One participant had to highlight the generalised lack of importance attached to mental health within the country by saying:

“We haven’t taken mental health seriously as a nation. Mental health is not taken as a priority”.

For instance, the participants argued that mental health is sidelined from the policy and budget process in favour of other health problems such as HIV/AIDS. Participants called for a more pro-active approach by health authorities which raises awareness about mental health that would change the way people including healthcare practitioners handle mental health problems. They felt that improving mental health care services required the participation of people affected by the mental policies and services.

Discussion

The study highlighted some the key drivers of poor mental health and psychosocial distress among health workers responding to COVID-19 in government hospitals in Zimbabwe. Although the findings of this study are by no means exhaustive, an important basis for devising strategies and policy interventions to help medical practitioners cope with the psychosocial burden emanating from COVID-19 is established.

The results of the study, and in agreement with the MHPSS analytical framework, show that several tailored interventions that can be more specialised depending on the extent of the mental health condition needs to be devised. HCWs require a supportive environment, be it at home, the workplace or in the community which must be strengthened during the peak of the COVID-19 waves.

Existential challenges in the health system that predispose health workers to various stressors in the discharge of their duties need to be tackled, while more formal and institutionalised mechanisms to provide support and mental health services for health care workers need to be established. Finally, individual, institutional and policy level barriers that inhibit health practitioners from accessing mental health services need to be addressed.

The interviewed HCWs reported experiencing discrimination and isolation from friends, family and workmates. These emanated from the perception of health care workers being high risk individuals who are likely to transmit COVID-19 as compared to the rest of the population.

At the workplace level, it was observed that the zoning system that was implemented by most hospitals as an infection, prevention and control strategy clustered the health institutions into red and green zones, with the former being the COVID-19 units. Measures taken to ensure that the COVID-19 units are adequately equipped, and well-staffed to minimize cross departmental sharing of equipment and personnel are insufficient.

There is also absence of regular testing of HCWs for COVID-19. Access to testing facilities for COVID-19 and adherence to strict infection, prevention and control practices will serve to minimise the negative perceptions towards health workers in the COVID-19 units. Authorities have not put in place adequate measures to ensure that health workers who experience discrimination or isolation, are properly counseled and linked to further health services.

The work environment also plays a critical role in promoting the mental well-being of HCWs in the discharge of their duties. The study revealed the numerous workplace related challenges that affected the medical practitioners responding to Covid-19 in government hospitals in Zimbabwe. HCWs operate in a stressful environment which calls for an urgent need for health authorities to review the working hours for health workers in the COVID-19 units.

Most HCWs reported experiencing fatigue, burnout and depression due to the increased burden of work, with reports of working abnormal shifts and during off days. There is need to ensure more HCWs are channeled towards the COVID-19 units during the peak of the different COVID waves. This could be attained through strategic redeployment, and employment of new health workers to increase the existing workforce.

Another aspect of the work environment was the nature of the boss subordinate relationship. The health workers showed a disinclination towards directive and autocratic leadership styles. Instead, they preferred superiors who have a high concern for people and who utilise a collaborative approach to decision making. Leadership and crisis management trainings targeting health care workers and the health institution leaders need to be conducted to foster teamwork and ensure a healthy work relationship that is both aimed at achieving the results required in an emergency setting posed by the pandemic.

On the other hand, the burden posed by COVID-19 on the health worker requires the leaders at the health institution to be empathetic and considerate to the challenges being faced by the health workers both in their professional and personal spheres.

Attention also needs to be given to certain components of the health system that have an impact on the mental and psycho-social well-being of health practitioners. For example, the study highlighted the glaring gaps in terms of mental health service delivery targeting health care workers. Health workers had to resort to other means of psychosocial support as health facilities lacked specific units that provided counselling, screening, treatment and follow up care to health care workers in need of mental health services. We recommend the setting up of psychosocial support units within health institutions or by other relevant stakeholders that provide specialised care to the frontline workers responding to COVID-19 in Zimbabwe.

The unavailability of PPE was observed to have negative impact on the preparedness of health care workers to handle cases of COVID-19. Although the availability of PPE has improved since the onset of the pandemic, stockouts of PPE remain a challenge. Furthermore, the correct usage of PPE needs to be fostered through trainings particularly at the decentralised levels of the health care system.

Support needs to be given towards ensuring that health workers are adequately protected from contracting COVID-19 at the workplace. This support also needs to be extended towards the availability of medical sundries and consumables. It was noted during the study that health practitioners had feelings of helplessness, and guilt as they were forced by the limitations in available resources to be the arbiters between who receives optimal care and those who do not.

This study highlights the lack of guidelines on procedures to be followed by health practitioners who may require mental health and psychosocial support services. In our study, we observed the lack of clear institutional protocols to provide guidance to health workers in need. There is also absence of routine screening procedures that help to identify at an early stage HCWs who need additional support, referral or more specialised care. In the absence of guidelines or institutional protocols and routine screening practices, health care workers responding to COVID-19 may not provide optimal care to their patients and may also suffer long term psychosocial consequences and harm.

There are also no mechanisms for open dialogue at the workplace where the HCWs and their supervisors openly discuss mental health issues, procedures to take when in need of support. Further, there is lack of a conducive environment necessary for HCWs to help each other debrief, share experiences and collaboratively devise strategies or coping mechanisms of dealing with difficult situations.

Finally, there are too many barriers that contribute to the low utilization or uptake of mental health services by HCWs. At the individual level, we observed poor mental health care seeking behaviours amongst health care practitioners. There are no targeted campaigns for health care workers and specialised information sessions required to help HCWs understand the need to have regular screening and access to mental health and psychosocial support services.

No deliberate advocacy initiatives targeting de-stigmatisation of mental health among medical practitioners are being undertaken to increase uptake of mental health services. Information centres at the different health institutions lack capacity to provide information on where, how and what type of mental health services and psychosocial support is available to HCWs in need.

There are also gaps at the policy level due to limited attention given to mental health from the national budgeting, policy planning and implementation of sector wide initiatives. A conducive policy framework will help to support positive mental health practices in Zimbabwe such as integration of mental health services in primary health care centres.

Recommendations

In light of the findings of this study, this study recommends that: -

1. Government and other responsible authorities should strive to increase the number of HCWs employed within the public health care system so as to ease their work-load. This is critical because currently there is a severe shortage of HCWs which entails that the few that are available are strained which is a source of stress and burnout.
2. Improved working conditions including better remuneration will also work to contain rampant brain drain within the health sector. Retention of staff will ease work load on staff currently employed in red-zones and other departments in the public health facilities.
3. There is need to raise awareness on causes and treatment of mental illnesses so as to deal with the stigma currently associated with mental illnesses in our communities. Targeted campaigns for health care workers and specialised information sessions may need to be conducted to help HCWs understand the need to have regular screening and access to mental health and psychosocial support services.
4. It is necessary to establish more democratic leadership styles within the health-care system as HCWs expressed disdain towards autocratic systems. Such disdain breeds job dissatisfaction which in turn will affect health care service delivery.
5. This study recommends the setting up of psychosocial support units within health institutions that provide specialised care to the frontline workers responding to COVID-19 in Zimbabwe. Routine screening procedures need to be put in place to help identify at an early stage HCWs who need additional support, referral or more specialised care.
6. The government should increase its investment in mental health service provision. This can be done partly by employing psychologists and counsellors within the primary health care system and public institutions. There should also be serious investment in tools of the trade such as

psychometric instruments which are necessary for screening and diagnosis of mental disorders.

7. There is need to foster the correct usage of PPE through trainings particularly at the decentralised levels of the health care system. Support needs to be given towards ensuring that health workers are adequately protected from contracting Covid-19 at the workplace.
8. There is need for guidelines to be developed to guide health practitioners who may be in need for mental health and psychosocial support services. This study revealed the lack of clear institutional protocols to provide guidance to health workers in need.

Limitations of the study

Our study had its limitations, and, in this section, we outline these and how we also minimised their impact on the study findings. Firstly, interviews were conducted with doctors working in government hospitals and practicing in few selected hospitals in Harare only.

A homogeneous sample has its advantages of simplifying the data analysis but on the other hand does not allow for the triangulation of the different perspectives shared by different health care practitioners. However, we tried to select medical doctors working in different settings within Harare province to get maximum variation of views and perspectives.

The COVID-19 situation did not allow us to conduct face to face interviews, thus limiting on the extra nuances that can be obtained from a physical interview. However, we did manage to record the interviews and derive maximum interpretation from the available data. Finally, the study findings must be interpreted within the described context, although we tried to fully describe the Zimbabwean mental health context to allow interpretations to different settings. We also tried to ensure we meet the criteria for trustworthiness as described by Lincoln and Guba (1986).

Conclusions

The study highlights the multilayered, multifaceted and complex interaction of individual, family, societal and health system factors that foster poor mental health amongst health workers at the frontline of responding to COVID-19.

Using the explorative nature of qualitative research, we analysed these factors and proposed several interventions as guided by the MHPSS analytical framework on the interventions to improve mental and psychosocial well-being in HCWs working on COVID-19.

Increased investments in strengthening the health care system and devising targeted strategy to deal with individual and societal perceptions on COVID-19 may be of immediate value.

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