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Research Article

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The perceptions of health care workers on the provision of services amidst COVID-19 pandemic in a maternity care hospital: Qualitative study

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Abstract

Introduction: *COVID-19 infection is still spreading throughout the world despite vaccination and control measures. The health care worker is overburdened with the increased workload. It is a challenge to work with the emerging disease with ever-changing protocols. Therefore, this study aims to explore the perceptions of healthcare workers in a maternity unit of a Sri Lankan Hospital on the provision of services during the pandemic.*

Methods: *In-depth interviews were conducted with 27 participants representing different health care worker categories during the second wave of the COVID-19 pandemic in Sri Lanka. The sample size was determined by the achievement of the saturation point. The interview guide allowed exploration of work-related issues, health system-related issues, logistical issues, and psychological concerns. The manual inductive content analysis method was used to analyze the data.*

Results: *Analyzed data revealed 15 themes which include a sense of duty/ self-satisfaction, concerns toward the loved ones, concern towards themselves, doubts about the disease, care for the patient during the pandemic, changes in managing emergencies during the pandemic, support from other HCWs, work-related burn-out, pandemic related barriers to serving patients, support from the administration, discrimination by the others, awareness programmes for COVID 19, PPE related issues, the ambiguity of national guidelines and equality for all.*

Conclusions: *COVID-19 has affected the lives of all personnel, including the HCWs. They are requested to continue providing services amidst multiple concerns, including the scarcity of medical equipment and cadre. Policymakers and government should investigate the possibility of financial assistance and psychological support programmes to boost the spirit of the health care workers.*

Keywords: MLST, Multilocus Sequence Typing and Treponema Pallidum

Introduction

Coronavirus disease (COVID -19) or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is highly infective. Though the majority of cases are mild diseases, high mortality is reported among immunocompromised(1). Currently, it has been declared a pandemic, causing diverse psychological changes in the population in addition to physical and social well-being. Knowledge of COVID-19 is often changing and evolved since its onset.

Health care workers (HCW) face many problems during this challenging time. Maternity services are altered in several ways due to pandemic(2,3). Most maternity health care systems are overwhelmed with the ever-increasing number of patients,

stretching resources to their maximum. Poorly understood pathology and evolving new knowledge contribute to the distress of health care workers. Health-care providers often show their resilience and dedication to overcome difficulties. However, COVID-19 is linked with multiple mental health problems in patients and the HCWs(4,5). Accumulating evidence suggests the need for additional support for mental and psychological well-being (6,7).

The accumulating evidence suggests that HCWs face many challenges including issues with their own health and being marginalized by society which demotivates them from their work. A qualitative study conducted in the United States of America on home health care workers has revealed that inconsistent delivery of information on COVID-19, inadequate PPE, and a heavy reliance on public transportation are the main challenges (8).

Few other studies involving healthcare workers have demonstrated that further support and knowledge on COVID-19 are important for sustainable health care provision (5,7,9).

De Soysa Hospital for Women (DSHW) encounter an increasing number of COVID-19 patients and caters for many medically high-risk pregnancies as a tertiary care maternity hospital. It was prudent to use DSHW as a study setting as it deals with many obstetrics emergencies and high-risk pregnancies. The findings of this study may benefit improving the short-term and long-term well-being of the HCWs and health care provision in maternity care.

Methods

The study was conducted in the De Soysa hospital, a tertiary-level maternity care hospital in Colombo, Sri Lanka. Patients from lockdown areas, patients who are quarantined, patients with symptoms of COVID and patients who have had contact with COVID-positive cases were admitted to the newly formed isolation ward of this hospital.

All categories of health care staff {consultants (CO), medical officers (MO), nursing officers (NO), midwives(MW), and healthcare support workers (HSW) }working permanently in the DSHW were included in the study. Staff members currently on leave who reported to work recently (within 1 week of the interview after a long leave such as maternity leave) were excluded from the study.

The sample size was determined by considering the saturation point. All staff members were invited. To ensure representativeness, one volunteered member of a staff category was interviewed from one ward, and the next member of that same category was interviewed from the next ward. Participants were interviewed after taking informed written consent by the Principal Investigator (PI), who was trained in qualitative research techniques. Health care workers who were willing to enrol were given a date and a time according to the convenience of the staff member. An appointment book was maintained to prevent overlapping interview times by the PI. Only the PI had access to the names and times. The participants were able to withdraw from the study at any point, and the recordings were deleted as per request.

The interviews were conducted following all safety guidelines. Participants who were not willing for face-to-face interviews were offered Zoom or telephone conversations. The purpose of the study was explained to the staff member, and she/he was requested to express their ideas freely. The interviews were recorded with permission while the confidentiality and security of information were ensured.

An in-depth interview was carried out with open-ended questions based on the interview guide, which was designed by the consensus of the research team and on expert guidance (Annexure 1). The following areas were initially explored by the staff members to address their experiences, fears, expectations, and ideas. The process was iterative. Depending on the response, additional areas were encouraged and added in the subsequent interviews.

1. Self and family care during the pandemic
2. Maintaining patient care during the pandemic
3. Management of emergencies
4. Social response
5. Logistic support and administrative support Additional areas added during the process
6. National response
7. Quality of care.

All the in-depth interviews were recorded with consent. The recordings were kept password protected with the enrollment number and always under the principal investigator's supervision. The recorded conversations were transcribed by two authors on a daily basis. The interviews were continued until all investigators agreed on a saturation point based on the transcripts of each staff category. The transcripts were manually coded by all four authors by reading line by line. A further inductive coding process was selected to minimize bias and maximize the identification of themes.

The content analysis identified common themes and sub-themes across different staff categories, which were grouped together. The flat coding framework was used to organize the themes. The consensus was achieved through the discussion of all investigators on themes that were controversial.

Ethical approval was obtained for this study by the Ethics Review Committee (ERC) of the Faculty of Medicine, University of Colombo. Permission was obtained from the Director of the institution after the ethical approval was granted. Data collection was carried out from the 20th of November to the 20th of December 2020.

Results

Twenty-seven health care workers were interviewed including 7 medical officers, 2 consultant obstetricians, 8 nursing officers, 5 midwives and 5 health staff assistants. Twenty-one of the twenty-seven participants (77%) were females. 11 (41%) were unmarried. The mean age of the sample was 34.4 years and the mean duration of service was 10.5 years. Meantime duration of the interviews was 11.8 minutes (range 6-21 min) Table 1 describes the above parameters by staff category.

Staff category[a]	Mean age years	Mean service duration in years	Gender		Marital status		Men duration of interview (Min)
			MaleNo(%)	**Female**No(%)	**Married**No(%)	**Unmarried-**No(%)	
Consultant Obstetrician (CO)	44	19.5	100	0	100	0	13
Medical officer (MO)	32	6	42.8	57.2	28.5	71.5	13.2
Nursing officer (NO)	36.1	14	0	100	87.5	12.5	12.8
Mid-wives(MW)	34.8	10.8	0	100	40	60	10.4
Healthcare support work-er(HSW)	30.6	7.2	0	100	60	40	9

Demographic details of the participants with the duration of the interview.a job description of the participants at the time of the study Fifteen main themes related to service provision during the pandemic were identified under the areas explored. Few subthemes also emerged from some of the main themes, which warrant attention. Figure 1 highlights the main themes and sub-themes that emerged from the study.

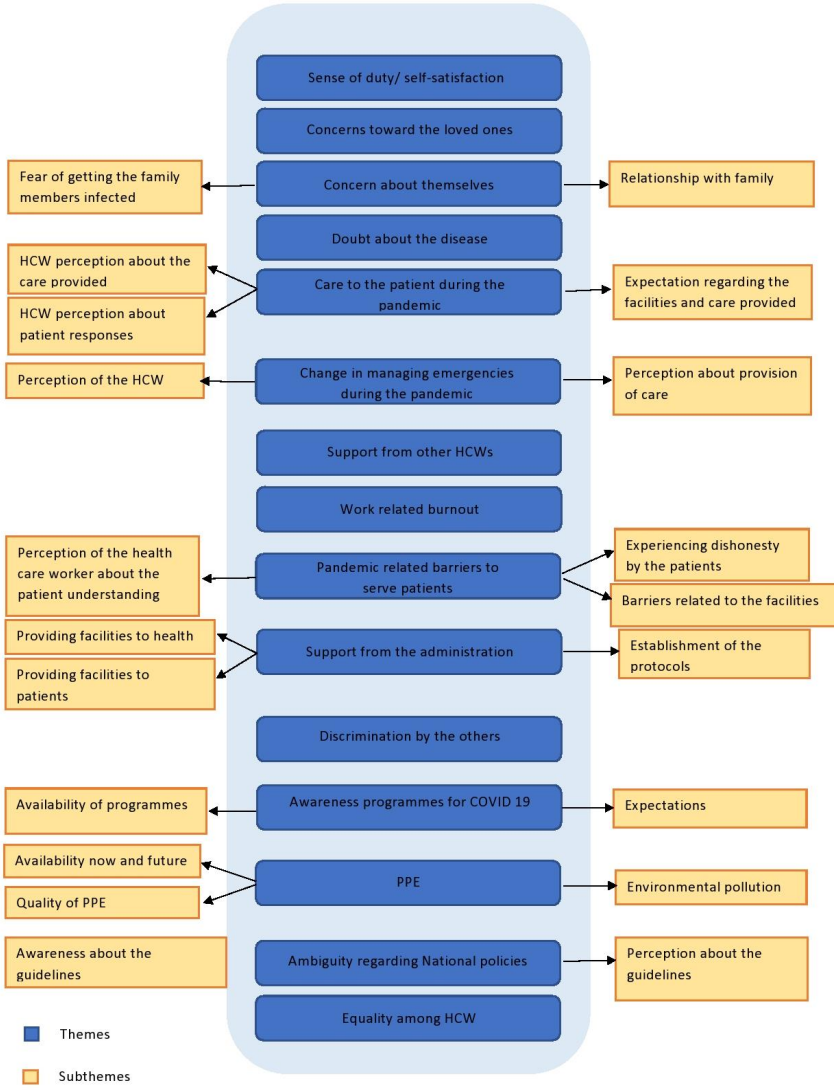

Figure 1: Themes and the subthemes

Sense of duty

Some perceived provision of care for suspected patients with COVID as a privilege. Young staff members who were rostered to work in isolation wards described it as an opportunity to contribute to the battle against COVID. Few even regarded selection to work in isolation wards as a proxy marker of their medical fitness.

"I'm happy to contribute to the care of COVID patients as a young doctor, I had the opportunity to serve a group of marginalized patients "(MO)
"I'm contented with my work for COVID patients. The work makes me happy and proud" (MO)
The happiness in contribution was noted in all categories. Many have volunteered to the work.

Concerns toward loved ones

Fear of getting the family members infected: Almost all had concerns about loved ones. Many were scared that they would transmit the disease. Infection control measures are applied to protect the family members. Many described measures that they have taken to minimize the risk of infection. Many were worried about the family members with medical co-morbidities.

"I and my wife adhered to standard practice at home; I have changed the daily routine at home." (CO)
"I sent my grandfather to an isolated area in the country to protect him from the potential infection from me" (MO)
"I have given instructions to family members. I am doing shopping for them." (NO)
"Since my parents have chronic diseases, I'm so scared that I will take it home" (NO)
Relationship with the family: Working as an HCW during the pandemic has affected the physical relationship with the family drastically. Two participants have not gone home for more than 2 months after COVID second wave. Some others visited their homes infrequently to minimize the risk. Some were concerned regarding the possibility of getting the infection by using public transport. Some others stated that lack of transportation facilities is a reason for the infrequent visit.

Despite all these limitations, the majority stated that their relationship was not affected significantly during this challenging time. However, few had experienced some major issues.

"I go home once a month; travelling is difficult these days. Also, I do have not enough time to go home due to the high workload. Even I go home; I sleep in a separate room. I use separate cutleries to eat, and I talk to them, maintaining the distance" (HSW)
"I maintain the distance with my family members as much as possible by trying to avoid kissing and hugging as much as possible" (NO)
"My husband cannot come home as he works overseas, but the last time he was at home, I didn't make it home due to work; it has caused major strain on our relationship" (NO)

Concerns about themselves

Many believed that PPE offer total protection and motivated them to work closely with the patient.
"We are protected due to PPE; I don't think COVID is a threat when we are in PPE" (HSW)
"I'm sure I will not get it due to the precautions that we use" (NO).
Many have self-studied the natural history of the disease. Self-education has encouraged them to work.
"We continue our duties as usual; nurses are not scared to be with patients as they are protected with PPE" (NO)

Doubts about the disease

All were aware of the highly contagious nature of the disease. Many believed young healthy people have a milder course with full recovery. The majority were not concerned about contracting the disease while working. Nevertheless, few who had chronic illnesses like asthma were very concerned about contracting the disease. All were aware of the mode of transmission of COVID-19. "I was scared initially when we set up the ward; however, now I know how the disease is transmitted… I fear less". It was interesting to note that many of the participants learnt about the disease from the media but not through any institutional mechanism. The positive attitude of continuous learning to serve the patients and protect themselves was expressed.

Care to the patient during the pandemic

HCWs' perception of the care provided.: More than 50% of the participants felt that the provision of care has been sub-optimal. Some stated that "We only provide essential care due to the prevailing condition". Few said, "It is evident that there is a reduction in care due to the fact that elective surgeries and gynecological clinics have already stopped" (COs) "Because of this situation, patient conditions can get worse without treatment; for example, we recently had an emergency admission where we needed to transfuse the lady because she could not obtain outpatient treatment for heavy menstrual bleeding" (CO) …. I think we should treat all patients with necessary precautions" (CO).

One stated that the care had been compromised due to limited time spent with each patient. "Before the COVID period, we tried to attend to all the needs of the patients. Though we have not changed the practice, because of the reduced time spent with each patient, I feel that we are not attending to all the needs of the patient…" (NO) "Even though they are isolated in the ward with a mask, we inquire about their issues frequently and try to help" (NO)
"Since we do not go to the patient very often, it affects them psychologically, therefore, I think that itself is sub-optimal care" (NO)

Delay in management was raised by many. The long waiting time due to the triage procedure was highlighted. The inability to attend to the patient immediately due to the time taken to wear PPE was mentioned by many.

One even stated that the focus should be to stop the outbreak rather than on improving individual patient care "Relationship between the nurse and the patient is distant now. But this is not the time to think about improving the bonding. Everybody should focus on coming out of the outbreak" (NO)

One felt that reduced interaction between HCW and patient may be even beneficial to reduce the transmission "we have limited frequent interactions with the patient, but I think it is for the best of the patient and for us." (NO)
Many confessed that they feel "frustrated" and "sad" because they could not provide proper care due to the scarcity of equipment, facilities and restrictions imposed.

A vaccination program for maternity patients was a positive subtheme among the healthcare workers. Many expressed a positive attitude towards all government and private health services achieving coverage. "I feel barriers to achieving the immunization is less challenging compared to other countries; I haven't seen any anti-vaccination campaigns in Sri Lanka" (MO).

HCW perception about patients' responses: Many were concerned that patients felt isolated and separated. "They are isolated and separated ……" (MO)

"All patients have to undergo PCR …. Sometimes PCR reports take a long time to come" "I have observed that some patients became aggressive due to delay" (NO).
"I feel very sorry for patients who are isolated." (MW)

Many expressed concerns about patients' knowledge and attitude. The majority were frustrated since many patients do not adhere to safety precautions and regulations while in the hospital. All participants strongly believed in providing more knowledge to patients by the government and hospital authorities.

Expectations regarding the facilities and care provided.: Many raised issues of "Lack of adequate distance between the patients and all patients must use a common washroom…. Delays in receiving PCR reports cause isolation ward to be overcrowded … this may act as the source of infection". Staff in the isolation ward were unsatisfied with the facilities available for resting during the shifts.

Currently, the special care baby unit and routine postnatal care are in the same isolation ward. Staff was concerned regarding optimum care provided in the same set-up in the future as the number of patients is increasing rapidly. "Need more facilities such as CPAP and oxygen. Area is not enough to provide care. We might need more and more facilities in the future" (NO) "facilities such as boilers and washrooms should be increased" (NO)

Lack of uniformity in management and heterogeneity were emphasized. "We should start managing patients according to a protocol…. Care should be patient-centred rather than HCW centred…." (CO).

"Nurses were worried about the frequent changes in protocols of management of COVID positive /suspected patients…patients were not happy as their regular consultants have been changed …. some patients criticized the management is done by different consultants stating that their regular consultants managed them in a different way …which makes us feel uncomfortable" (NO)

"By this time, many countries have established providing routine care during pandemics …We are late to start due to lack of vision…I feel we should not limit routine care. In fact, we should provide our care with necessary precautions" (CO)

Changes in managing emergencies during the pandemic

Perception of the healthcare worker: "So far, no serious incidents happened, mainly because a well-experienced team is looking after the labour room. But if the workload increases, the situation might change in the future" (MO)

"In case of an emergency, delays can happen due to donning of PPE. Due to the limited number of care providers able to attend to an emergency, it may be difficult to manage" (HSW). However, many were confident that they can manage emergencies effectively in the given circumstances as they were experienced.

"I think having a little delay due to donning into PPE is acceptable as it benefits both patient and us" (HSW). On the contrary, irrespective of the category, many stated, "In an emergency, we will attend without taking many precautions as we are saving lives…."

Many expressed feelings of regret due to delays in attending to emergencies and were concerned about the consequences to the patient.

Perception about the provision of care: "I consider that providing emergency care has no exemption if we do not act promptly patient's health can be compromised, as an example, in the current situation for emergency caesarean section, more than one hour is taken for preparation. I believe there should be a pre-prepared emergency team to expedite it even further" (MO)

"If the staff is well trained on the precautions and pre-prepared for emergencies like cord prolapse and abruption. It is possible to attend to emergencies in a given time frame… I'm ready to take part in this endeavour at any given time" (CO).

Having a dedicated emergency team would reduce the number of PPE used. "it will preserve the number of PPE used per day as well" (CO).

Support from other HCWs

People who work together support each other physically and psychologically. "Everybody tells me and reassures me I'm capable of doing this task successfully.…" (NO). Duties in the ward were shared among the available staff.

However, many medical officers expressed the distress of senior members avoiding the duties by putting the less experienced juniors into the forefront "Some seniors tend to avoid duties and allocate the juniors to work more in the frontline" (MO). Some even highlighted the notable disparity in the Rota.

Issues with the senior staff were evident in further comments "Support from the seniors varies depending on the situation, it took some time for us to learn how to carry out our tasks in the new normal, I felt uncomfortable with supervision which was intense compared to the pre-COVID era" (NO).

Whereas some seniors were constructive and supported the juniors to catch up with work at the early stage of the pandemic, "I felt well supported" (NO)

It was revealed that HCWs anticipate more support from the administration, especially when they get infected with COVID. "No one checked up on me when I was in isolation; I expected it as it is an occupational hazard " (MW).

Work-related burnout

Work-related burnout was aggravated by having to use PPE for long periods, inadequate staff per Rota and increased workload. "We are in the same PPE for 2-6 hours it is so exhausting not only physically but mentally too" (MW).

"One day I had to wear the PPE from 7 pm to 3 am, I was so thirsty and hungry, I cried at the end…" (NO). Distress related to discomfort in PPE was very common among the participants. "It is very difficult. At the end of 20 min, we are soaked with sweat." (NO).

"Everybody has issues at home and work, and we are so exhausted due to workload. Sometimes we cry together" (NO).

Pandemic-related barriers to serving patients

Perception of HCW about the patient's understanding: "Patients need to be educated, their background knowledge is poor, they are not wearing the mask in the ward irrespective of our advice" (NO). Patients were requesting more comfort and more communication with the family during the stay. They were requesting to allow food from outside. Even though the food was supplied by the hospital. Patients' Reluctance to stay in the isolation ward was expressed to many HCWs

Experience dishonesty by the patients: "Some patients are not willing to provide accurate information about their whereabouts due to fear of discrimination" …. (NO).

Barriers related to the facilities: Shortage of the number of beds and accommodation were highlighted by some participants. "… We have only 18 beds, sometimes we have to keep 60 patients with 18 beds" (NO). "Patients have to stay in chairs for several days due to delay in PCR reports" (NO).

Support from the administration

Providing facilities to HCW: It is worthwhile to note that some participants did not agree to respond to the question. "I cannot comment on that" (HSW). "Staff is less, but we share the duties as much as possible" (HSW)
"We must anticipate higher workload in the future, more cadre should be allocated to prevent burnout. The infrastructure of the hospital is not very effective. The risk of contamination is high" (MO).

"Scrubs are not adequate. Scrubs get soaked after wearing PPE…. We have to work with wet scrub whole day…" (HSW)
" …. I think with better infrastructure, we can provide a better care…" (MO).
Providing facilities to patients.: Under the present situation, scarcity of facilities was highlighted "We have no backup equipment, and we are partially equipped for resuscitation which endangers patient safety" (MO). "…. Fathers cannot see their newborns due to current restrictions…. Mothers are on the chairs without beds after deliveries …this upset me a lot" (NO).

"Isolation is perceived as a punishment by patients. I think the outlook of the isolation ward is contributing to this perception…… Complete cleaning of Cardiotocograph machine and multimonitor as per instructions is not possible with the high patient load" (NO).

The benefits of patient education were expressed by some participants. "Patients should be educated before entering into the hospital to increase the compliance" (NO), *Establishment of protocols:* "Support is excellent by providing the materials and equipment. But protocols of the hospital change very frequently and there is a significant delay in receiving information about the changes… This leads to conflicts…there should be an effective process to disseminating the information" (NO).

"Information should be gathered from the frontline" (CO). Participation of people involved in direct care for decision making and designing of protocols was emphasized by many. Barriers to implementing the protocols were expressed. Inadequate participation of primary caregivers (junior medical officers, nurses, and midwives) was frequently expressed by the participants.

Discrimination by others

More than half of the respondents used the words like "never" and "hardly". But some emphasized that their contact with the outside world has been limited so they may be barricaded from such experiences. "I restrict myself in going to places of relatives and friends as I'm a health care worker….it is my choice" (MO).
However, some have been discriminated.

By other HCWs "I have been discriminated by other staff members especially in hospital rest rooms. Other staff members perceive me as a source of infection as I work with COVID positive patients" (NO).
"I experienced verbal discrimination by the other staff members in the hospital …" (NO).
"Some people refused to eat together." (MW).
"Some directly told me not to come near them" (HSW)
"One person jumped into the gutter to avoid me" (MO).

But most of the HCWs who were discriminated against understood the fear of the other HCWs. No conflicts were reported between the staff members due to discrimination.
By society, Both positive and negative attitudes were revealed.
"Some treat me well; When I went to buy some goods, I was given the priority" (MW).
"Some taxi drivers refuse to take us into the vehicles. In the contrary, some are welcoming and praise our service" (MO).
"Some people inquire from my parent whether I am at home or not to decide on visiting my place" (MO).

Awareness programmes for COVID

Availability of the programmes: Most were not satisfied with the availability of the programmes. "Hardly any" and "never" were the words used to describe the educational programmes.

"I self-learn; I never received a formal education about it" (MO)

"Not everybody gets the equal chance to participate. As a result, some HCW knows how to wear PPE, and some do not; I think training should be given to all" (NO)

"Finding the correct protocol takes most of my time" (MO).

Expectations: "There is no ongoing education programme" (NO).

"So far, I gathered information from the internet, I like to improve my knowledge further …." (NO).

All were receptive to new knowledge. The length of the national guidelines was a concern. Information in a simple and concise manner was emphasized by many. Focusing on reduction in heterogenicity of management was expressed by the medical staff.

PPE related issues

Availability: "We are wasting PPE, still there is room for preservation. At this rate, we will be exhausted soon" (MO).

Many expressed the difficulty of being in full PPE "it is difficult to be in the PPE, especially in labour suites without air conditioning" (MW)

"PPE is used liberally even without an indication; This is not prudent" (MO). A lot of criticisms were coming from some participants on the inappropriate usage of PPE.

Quality: Many claimed, "Some PPEs are good". Most were satisfied with the PPE quality, but some mentioned the poor quality of N 95 masks. Concerns were raised about donations that are not quality assured.

"PPE is not designed for the warm weather in our country, this matter is often neglected" (MO)

Environmental pollution: Emphasis on the biodegradable PPE was noted. Some are conscious of the load of plastic we are adding to the environment. Many perceived that the authorities have not been attentive to this issue.

Ambiguity regarding National policies

Awareness: "All were aware of the availability of National guidelines, but many had no time to read it with the workload" (MW, MO). Many expected the hospital to launch a programme to increase awareness.

Perception: Alarmingly, "We really do not adhere to guidelines…it is our weakness" (MO).

Satisfaction about the National COVID management programme was expressed by some "Government is doing the best considering the economy of the country, complete lockdown is not possible" (NO), but the deficiencies were pointed out as well

"No proactive thinking, guidelines are prepared retrospectively" (MO).

"We had enough time to get ready for the second wave, but we did nothing …" (CO).

"Quarantine policies are not compatible with economic status" (NO).

"Difficult to anticipate further improvement by the government …Government can increase the awareness, but individual responsibility should not be disregarded …" (NO)

Equality among the HCW

Most claimed that all were considered equal. But only a few had concerns in inequalities in rosters" (MO). Ineffective root cause analysis in incidents was expressed by HCWs. "Deficiencies have been there before the pandemic, but now it has become more obvious and more ineffective…. targeting the involved staff is deeply demotivating" (MW)

Discussion

This study showed that the participants have a major degree of fear towards their family members rather than themselves. Due to the contagious nature of the disease, HCWs are forced to live away from their family. The prolonged pandemic has aggravated these worries. Authors suggest exploring the possibility of providing the facilities to virtually connect with the family while at work and offering rapid testing prior to reporting to duty and the end of the long shifts (of days) may alleviate the anxiety of going back to loved ones. Another study carried out among healthcare workers has revealed similar findings indicating the need of looking at innovative solutions across healthcare communities field(10).

Many expressed the reason for fear is the prevalence of risk factors for severe disease among the family members. In this study, HCW expressed the fear of getting infected with the virus due to its contagious nature, which is similar to other studies conducted during the previous pandemic(11,12). But the symptoms of severe anxiety or depression were not expressed by the HCWs who participated in the study compared to the previous studies, which showed psychological distress among the HCWs(4,6,13,14). Only 2 participants reported crying but those were incidental and showed no signs of mental illness on deep questioning. A positive attitude toward serving the patients and self-appreciation of the job as a service rather than a paid job were noted during the interviews. The authors believe religious and cultural factors may result in lesser mental health issues in the sample compared to the other studies. However, the authors recommend exploring the psychological distress with validated questionnaires in a larger population.

Wearing PPE was reported to be unpleasant by many, especially due to warm weather and the absence of proper ventilation in the ward absence of air conditioning and positive pressure ventilation). This has led to more exhaustion. Having a longer shift has contributed to the distress due to PPE(15,16). Some express the possibility of fear of getting the infection due to long shifts. Also, the cooling and ventilation amenities can be considered to mitigate exhaustion.

Major changes were noted in labour care and post-natal care. This phenomenon was negatively perceived by the midwives. Studies have revealed that this has negatively changed the birth experience of the mothers and partners filed(17,18). Authors suggest telehealth facilities during and after birth to connect the mother with her partners is a viable option considering the DSHW setting. Further, follow-up appointments after isolation to discuss the management during labour may alleviate the anxiety of the couple. However, the lost opportunity of the partner to be with the newborn and mother might cause long-term emotional distress.

It has been found significant delays in emergency caesarean section. Adapting the accepted protocols to operating theatres to be prepared will alleviate this issue. Emergency obstetric care should be attended to with due diligence to avoid maternal and perinatal morbidity. Drills were suggested by the authors to obstetric teams to increase efficiency.

In this study, it was reported that the HCWs were experiencing a significant deal of infrastructure issues in providing care to high-risk COVID patients. Similar issues were reported in previous studies field(19,20). Reducing the patient load must be considered by changing the admission protocols. The lack of an emergency department was a major deficiency in services in the study setting.

Willingness to work was seen among the healthcare workers during the pandemics. Senior staff involvement in the physical and psychological wellbeing of the healthcare worker was expected. As the pandemic progress, training the supervising staff on psychological issues will mitigate the distress among the HCW. This fact has been emphasized by many studies field(6,14,19).

Discrimination by others was observed to a significant degree as in previous studies field(21,22).In the contrary, it was perceived as a norm by the study participants. The absence of distress due to discrimination was interpreted as the resilience of HCWs in difficult situations by the authors.

Ignoring the instructions of the patients was experienced by the HCW. These findings have been in line with other communities as well(23,24). Negligence can lead to the propagation of the disease throughout the country. It is a need of the day to influence people to adhere to instructions and comply with the HCW to minimize contamination. Education of the public before coming to hospital using the public health sector is a possibility. In comparison, the major reason behind the non-adherence was the economic crisis. Funding the underprivileged during this crisis will reduce the wandering outside for work by quarantined people.

Inadequate representation of frontline staff in policy making was highlighted as in other studies field(19,20). Authors suggest this will improve the work satisfaction and efficiency of the healthcare during COVID.

The staff was ready to make sacrifices and devote themselves to patient care. Dedication to the provision of care was higher, and burnout was lower compared to many settings across the world. This has ensured quality care during this unprecedented time. Strengthening the HCW with financial incentives and mental support to boost the spirit will maximize health care even with limited resources.

About the limitations of the study, the data collection was carried out during a short period of time in a confined community. The authors believe in the possibility of more ideas outside of the hospital. Nevertheless, our population represented various categories and data was collected until saturation.

Conclusion

Policies and protocols must be influenced by the ground-level workers to have a practical approach and prevent marginalizing the front-line workers. Updated educational programmes to mitigate the heterogenicity in the care countywide may support the HCW by reducing the workload and mental burden. Information flow to the ground-level workers should be through reliable sources such as experts in the field using contactless methods such as Zoom meetings.

Encouraging the public to adhere to and support the HCW is needed to be established in any means, even by using penalties. COVID-19 has affected the life all personnel, including the HCWs. They are actively providing the service with the scarcity of medical equipment and cadre. Policymakers and government should initiate financial programmes and psychological support programmes to boost the spirit of the work. Social media and mass media are suitable sources to upgrade the mental strength of the HCWs.

Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available due to the qualitative nature of the work but are available from the corresponding author on reasonable request.

Abbreviations

COVID/ COVID-19: Corona virus disease
HCW: Health care worker
PPE: Personal protective equipment
HSW: Healthcare support worker
DSHW: De Soyza hospital for Women
PI: Principal investigator

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