

Maldivian healthcare workers' experience during COVID-19 pandemic

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ABSTRACT *Coronavirus disease 2019 (COVID-19) is caused by a new coronavirus reported from Wuhan City, China. On 31st December 2019, the World Health Organization (WHO) China office was informed of cases of pneumonia of an unknown etiology which was detected in Wuhan city in Hubei Province, central China. By early January 2020, WHO released a statement regarding a novel coronavirus identified in patients admitted with pneumonia. This highly infectious disease spread at an alarming rate in many countries and became a global pandemic. It was declared as a pandemic by the WHO on 12th March 2020. The global pandemic of coronavirus disease (COVID-19) has affected different people in many ways. According to Health Protection Agency (HPA) of the Maldives, the government has been preparing for this pandemic from the 5th of January 2020 when WHO initially announced the outbreak of this deadly disease. Since then the government has taken a range of preventive measures and continues to do it. HPA has been advising people regarding the importance of infection preventive measures at an individual and a community level.*

COVID-19 is caused by a new coronavirus which was detected in 2019. It is caused by the virus SARS-CoV-2 (WHO, 2020). The effect of this virus is taking its toll in many countries. Similarly, Maldives began identifying imported cases from tourists. Moreover, the first local case of COVID-19 in the Maldives was reported on 7th March 2020 with a total number of 13 cases (Hussain et al., 2020). As of 18:00 hrs on 8th July 2020, 2517 cases were tested positive and 2180 cases recovered from the disease since its first detection. (COVID-19, Local Updates, 2020). Furthermore, the first community spread case was detected on the 15th of April in Male' the capital city of Maldives.

People of the Maldives enjoy a variety of socializing activities, such as family gatherings, fishing trips, outdoor games, as well as spending time in restaurants and coffee shops with their family and friends', especially during the weekends. As Male' is a very small city, the roads get congested during the weekends. Moreover, Male' has lots of migrant workers adding to this overcrowdness of the place. Since most of the expatriates get their day off on Friday, the limited parks and open spaces also get overflowing on Fridays. In addition, on Fridays, the mosques get packed and as a result, people perform prayers on the roads adjacent to it.

The capital city, Male' is very crowded making it very difficult to maintain physical distancing as advised by the HPA. People are advised to stay on self-

isolation and if they had any symptoms to report to the flu clinics during this pandemic. The capital city Male' was thus under lockdown from 15th April for 2 weeks, followed by further extensions of the lockdown. This restriction of physical contact and isolation created numerous issues in the country. Some of the restrictions included the temporary suspension of movement of people from resorts to other islands, a temporary restriction of movements of people between islands, and suspension of the use of public places including football grounds (Ministry of Health [MOH], 2020.)

As a result, some people were breaking the rules and disobeying the strict precautionary measures taken by the government. Effective quarantine and self-isolation were considered to be important measures to prevent the spread of this deadly disease (da Silva et al., 2020).

Unfortunately, 29th April 2020 led to the first fatality of COVID-19 in the Maldives. The result of the patient came positive after the patient had died. The deceased was suffering from multiple non-communicable diseases which may have increased the risk of complications related to COVID-19. This paper will highlight some of the experiences of healthcare workers and medical students who had been in quarantine and isolation facilities. In addition, this article will discuss some of the challenges faced by healthcare professionals due to the outbreak.

Method

A qualitative research methodology design was used to gather data in this study. The qualitative paradigm argues that there are multiple versions of reality even with the same person (Braun, et al, 2013). Purposive sampling method was used to generate data for this survey because it pursues to narrate the experience of the study participants on a specified area of interest (Cohen, Manion, & Morrison, 2007). Hence, the sample was handpicked from those who are regarded to be representative of the population. Furthermore, purposive sampling in qualitative research enhances the transferability of results (Cypress, 2017).

This self-reported review includes 8 participants from 3 different groups including nurses, doctors, and medical students who volunteered to narrate their experiences. In qualitative research, the number of participants is not important because the addition of each new individual diminishes the in-depth picture (Creswell, 2005). The participants were contacted through both mobile phone and on online platforms. These methods were used because the country was in complete lockdown, and hence, face to face meetings was impossible. Semi-structured open-ended questions were used, for example, "Tell me your experience in working with COVID-19 patients."

Verbal consent was obtained after a thorough explanation of the survey to the participants. To maintain anonymity and confidentiality, participants' names are not used. Ethical approval was obtained from the Maldives National University (MNU) research committee. Transcripts were read and re-read to get a clearer understanding of the participant's experiences. Broader themes were then identified from data.

Time constraints limited the comprehensive qualitative analysis aspect of this survey. Although this survey limits the proper qualitative data analysis approach, it

provides an important and useful insight into the experiences of healthcare workers during the ongoing COVID-19 pandemic.

Discussion

Lockdown Phase

Similar to many other countries, Maldivian citizens also found it very difficult to adapt to the changes necessitated by this lockdown. The experiences of lockdown for many Maldivians were very new and scary as many of the pleasurable activities had been shut off. Schools, universities, and government offices have been closed three weeks before lockdown. Most importantly, restaurants and coffee shops had also been closed. Restaurants and coffee shops are important venues for socialization and people were finding it extremely hard to adapt to this new routine.

The government had arranged ‘teleclasses’ for higher grade students before the full lockdown. However, the classes also had to be discontinued when the full lockdown was imposed to minimize the movement of teachers attending to schools and also to set an example to the public in support of lockdown (MOH,2020). Strict measures were also put in place for hospitals and other medical-related consultations. Therefore, different outpatient clinics, especially flu clinics and online consultation and mobile medical response team modalities have been arranged and implemented. For example, if anybody is experiencing flu-like symptoms such as fever and sore throat, they are advised to contact the HPA hotline number before coming to the clinic. Similar approaches have been established in many different countries (Spinelli & Pellino, 2020).

The government gave great importance to educating the public and creating awareness over television and social networks. Infographics and video clips were used to provide health messages regarding handwashing and other such practices to prevent transmission of infection. One of the strongest public health messages was to “Stay Home”. Since the Maldives is a country with a high number of expatriate workers, these messages were made accessible to them by translating into different languages and telecasted and posted to locally registered phone numbers. Furthermore, psychosocial support is being provided over the phone to people who need psychological support including those who are in quarantine facilities. As the pandemic is continuing in the world and the Maldives is in the midst of an increasing number of positive cases, it is very important to have a policy in place to help combat the psychological distress of healthcare professionals.

“Exceptional services”

In this section, the author will highlight some of the experiences of people who were quarantined at the isolation facilities. Medical students who came from Nepal and Bangladesh were taken to B. Atoll, Royal island, and Dhiggiri quarantine facilities by the logistics and facility management team of the operations managed by the Maldives National Defense Force (MNDF) staff who also does the briefing about the facilities and provides other necessary information.

The experiences were that rooms of the resorts were spacious with toilet

facilities and were well maintained. Nutritious food was provided by very friendly staff. Staff from the facilities worked tirelessly day and night to provide the best service for them, and requests were met in considerable time.

“One morning I got a surprise knock on the door. It was one of the staff holding a tray of “juice petty” offering me one saying that it was a gift from the resort management” (3rd-year medical student). This made their day and the stay very special and felt like home.

“I was filled with gratitude and respect as it was them who deserved gifts after all the hard work they have been doing. It is a shame that some do not appreciate any of this”.

From my experience, I would say it was rather a much-needed break for us from the stressful life of the medical school.

Another student explained that the experience of the isolation facilities and the services provided was very well organized and the food was very good and tasty.

“I was so surprised to get “fihunu mas” and rice for my lunch as I was craving for it for a long time” thanks to the hard-working staff of MNDF staff who went above and beyond to make this possible”

The other important aspects of the isolation facilities were that they were allowed to receive necessary items from their families. The students described this as a great idea for their parents to get in touch with them and to let them know that they were being fed and taken care of well. One student said, “I think this is a great idea because our parents wouldn’t worry much as they would know that we have enough food to eat at any time”.

Extra recreational activities planned for the students was highlighted as very important to make their stay as comfortable as possible. Some of the activities included photography competition and feeding sharks. Moreover, some other students explained that the availability of support from Maldivian Red Crescent was a great help.

“I found this to be really helpful and supportive and knew there was a way that I could get support if the quarantine took a toll on me as the days went by”.

“A different experience”

Health professionals working with patients who are positive for COVID-19 and suspected cases are at an increased risk of getting the infection and developing mental health problems (Xiang et al., 2020). In addition, many healthcare workers have been infected in various countries and lost their lives to COVID-19. Unlike many other countries, for most of the health professionals in the Maldives, it is the very first time that they are experiencing such a pandemic. Hence, it led to heightened fear and anxiety due to a lack of knowledge regarding the disease. However, despite being short of staff and medical supplies, they are showing incredible courage and enthusiasm taking care of COVID-19 patients.

Similar to health professionals worldwide, Maldivian health professionals are also facing numerous challenges related to the use of Personal Protective Equipment (PPE) and long working hours in the PPE. The Center for Disease Control (CDC) guideline recommends PPE (a gown, gloves, N95 respirator, and face shield) to minimize the risk of infection. However, wearing an N95 mask as

part of PPE causes increased breathing resistance demanding greater respiratory effort (ICN, 2020).

One of the very courageous and dedicated medical officers has stated that “It’s very hard to wear an N95 mask with all those PPE for 8 hours”. He added, “Sometimes you won’t hear anything when auscultating the lungs, you will have difficulty in feeling the pulse with a double glove, your goggle will be foggy and you will not see anything” (Medical Officer, A).

“I went to the nursing station and went through the notes to familiarize myself with the case ... After a few minutes, I started feeling the unbearable heat being inside the PPE and it was a bit difficult to breathe too with the N95 mask on”. (Medical Officer, B).

However, adherence to the precautionary measures is essential to protect oneself from getting the infection and to prevent cross-infection. Furthermore, for the safety of healthcare workers, devotion to evidence-based guidelines and following the use of masks, hand hygiene and environmental hygiene enhance the safety of healthcare workers (Adams & Walls, 2020).

While health professionals accept the greater risk of infection in their chosen profession, they are often fearful about the transmission of infection to family members, especially when the family includes elderly parents, children, and other vulnerable members. Hence, many health professionals chose to stay away from their families during COVID-19 duties, making it a very challenging experience for them and their family members. Medical officers explained their concerns.

“It is so hard to be away from your family and live separately during this time when I am treating COVID-19 patients” (Medical Officer, A).

“I informed my family that I would not be visiting them anytime soon again as I have attended this patient and officially I have started working with COVID-19 patients. And since then, though I miss them, I haven’t visited any of my family members living in Male’... to whom I used to visit at least once a week in my off days prior to this”. (Medical Officer, B)

However, according to one medical officer, it is very early in the pandemic and not yet overwhelmed with cases, thus mentally managing well. The mental health of health professionals is very important as the pandemic is still evolving and the number of cases is expected to rise in the Maldives. Nevertheless, during epidemics and pandemics, enough time is not available to get prepared. The following statement explains the situation ...

“I felt a bit nervous as I did not get much information about the patient. At the time I didn’t know if the patient was a COVID-19 positive patient, condition, or severity of the patient.” (Medical Officer, B).

All health professionals should be well prepared mentally for such pandemics as its outcomes are often devastating and unpredictable. They should not be given false reassurance but honest information on what to expect and what they will face (Greenberg, et al, 2020). Most importantly to avoid moral injuries where they experience negative experiences about themselves (Greenberg, et al, 2020). Furthermore, healthcare workers must consider themselves at increased risk of exposure to infections and psychological compromises. In addition, properly preparing the staff for the pandemic and its associated risks and consequences reduces the risk of mental health problems (Brooks et al., 2015). However, peer support, online counseling forums to vent out problems and share information,

and scheduled rest periods may benefit the health workforce (Zhang et al., 2019). Furthermore, routine peer support programs should include a briefing about moral injuries, self-awareness sessions, and other dangers to mental health because even the most resilient health professionals may become overwhelmed by the situation (Greenberg et al., 2020).

Another challenge to health professionals during this COVID-19 pandemic is that nurses are being harassed and bullied on the way to and from work and some of them have been evicted from their residences (Koh, 2020). This is a worldwide issue that is beyond acceptance. Many nurses and medical doctors from Thailand and Indonesia have been rejected from their communities as they are considered as potential sources of infection (Koh, 2020).

Nurses challenging experiences

Nurses are crucial health professionals working in the frontline during this COVID-19 pandemic. Front line nurses are providing care from the most basic care to critical nursing care. Nurses are working tirelessly during these difficult times, leaving their loved ones behind. In the Maldives, there are five different COVID-19 isolation facilities where nurses are doing duty with full Personal Protective Equipment (PPE). These facilities are managed by the nurses in collaboration with the facility management team. Many of the dedicated nursing managers are doing beyond their call of duty to protect and save lives in the country. As we celebrate the international year of the nurse and the midwife, the world has been forced to recognize the importance of nurses and midwives and it should be continued.

In addition to giving bedside nursing care, many nurses are involved in contact tracing, surveillance of cases, prevention of infection control measures, home quarantine process, sample collection from suspected and confirmed cases, administering training programs, and providing psychological first aid, and providing psychosocial support. In addition, many nursing academicians are also involved in conducting training for nurses working in the atolls. The training includes the use of PPE, Oro, and nasopharyngeal sample collection, and the nursing care of patients. Furthermore, nurses are liaising with clinicians regarding patient care ensuring appropriate preventive measures are taken during the sample collection, case management and follow up of the results. Nurses are the backbone of healthcare systems all over the world. Nurses in the Maldives have a huge responsibility of setting up and running the isolation facilities and managing it. Many nurses are working in isolation facilities and trying to adjust to the different working environment. This adaptability and resourcefulness of nurses have been proven beyond doubt in this challenging time. This apparent capability, deviated away from direct and basic care for patients, is holding and keeping the whole healthcare system up to the challenge of the day, yet also testing nurses to the limits.

One of the nurses explained that changing the facility daily and adapting to the new routine in a different facility was very difficult. Evidence suggests that shift from individual to clinical-based care to population-based care may provide challenges during infectious pandemics (Burkle 2006, cited in Jill Iliffe, 2008). Nurses in the Maldives are showing their bravery in taking care of COVID-19

patients in different areas. Many nurses are working long hours in isolation and quarantine facilities other than the main hospitals. Most of the nurses expressed concerns working with PPE. According to one of the nurses:

“At first I was a bit hesitant to work with PPE as it was difficult to perform the tasks, but later on it was OK”.

They also highlighted that they weren't sure about how many times they can use a PPE without disinfection, and were concerned with the unavailability of enough masks. Concerns were raised by nurses on self-protection even with the full kit of PPE. Furthermore, apart from being a nurse, they are also a member of a family, a mother, a wife, or a sister who has many responsibilities for the wellbeing of their family members. Nurses expressed deep concerns regarding the protection of their family members. Our own family weighs heavily on us as nurses at this time (Gaston et al., 2019).

“I am not sure even if we wear PPE there is 100 percent guarantee that we will be safe. so the only thing that I am concerned about is going back home to my family after the duty”

One of the ICU nurses also explained it as being worrisome. She said

“my biggest worry was not that I could get infected but the risk I put my family through every time I go home after duty”.

Such concerns were addressed by providing them with separate accommodation. Despite being away from the family and loved ones, nurses are doing their role with pride. One of our nurses is proud to proclaim “I do not regret even a single day being a COVID-19 ICU nurse”.

Wearing PPE is an essential part of the precaution to protect nurses and prevent cross-contamination when providing routine care of patients with communicable diseases. Yet, using hazmat suits for work might be a new experience and could be a challenge for our Maldivian nurses. Likewise, working with PPE is another challenging experience that nurses all over the world are facing today. Some of them find wearing an N95 mask for a long time as the biggest challenge while others find goggles being the most uncomfortable PPE.

The following statement explains this: “N95 mask was the most talked-about PPE; however, the most challenging for me is the goggles as it gets foggy after a while which enables us to have a good vision...we can say that we were working half-blind most of the time”.

Conclusion

COVID-19 has posed many challenges to all aspects of life in the Maldives, especially for the healthcare workers. This paper has looked into the experiences of healthcare workers and medical students who stayed on service in the facilities designated to the care of COVID-19 patients. This is a testing time for humanity all over the world. We need to support each other during this difficult time. Maintaining social networking and family relations is important for mental wellbeing. Furthermore, healthcare workers should be given the necessary training for the precautionary measures about COVID-19 disease as we are unfamiliar with most aspects of this virus. As no cure or a vaccine has yet been developed, most importance has to be given to social and physical distancing measures as it slows down the spread of

the disease and helps to reduce contact with contaminated surfaces to prevent cross-contamination (WHO, 2020). Comprehensive qualitative and quantitative analysis is important to explore the wider aspect of this developing situation in the Maldives.

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