CLINICAL ETHICS

Clinical Ethics
1–9

DOI: 10.1177/14777509221134499
journals.sagepub.com/home/cet
SAGE

Ethical challenges in clinical practice during the COVID-19 pandemic in an academic healthcare institution in Malaysia: A qualitative study

Sharon Kaur[1], Mark Tan Kiak Min[2], Shu Hui Ng[3,4] and Chirk Jenn Ng[5,6]

Abstract

Background: Healthcare professionals (HCPs) face a myriad of ethical challenges during the coronavirus disease 2019 (COVID-19) pandemic. However, there is limited literature examining the ethical challenges faced by HCPs in low- and medium-income countries. The research was designed to explore the ethical challenges experienced by HCPs in a Malaysian hospital setting during the pandemic.

Methods: Semistructured interviews were conducted via video calls with 10 Malaysian HCPs across different clinical disciplines involved in managing patients diagnosed with COVID-19 infections. The calls were audio-recorded, transcribed verbatim and checked. Thematic analysis with constant comparison across transcripts was carried out to identify categories and themes.

Results: Three main themes emerged. Firstly, there was deprioritisation of care for non-COVID-19 patients resulting from resource limitations. HCPs raised concerns that there was curtailed access to various healthcare services by non-COVID-19 patients. There was also a trade-off between protecting individual patient safety and public health interests. Secondly, patients were disempowered from decision-making; the decision to segregate suspected COVID-19 patients to high-risk areas without seeking patients' approval may result in an increased risk of infection. Lastly, HCPs expressed internal conflicts when balancing the professional duty of care against concerns about contracting COVID-19 and spreading it to their family members.

Conclusion: The study highlighted ethical issues faced by HCPs in Malaysia during the pandemic. It underscores the need for clinical ethics consultation services in hospitals to navigate the various ethical dilemmas.

Keywords

clinical ethics, epidemic ethics, COVID-19, Malaysia, qualitative study, global health

Background

Coronavirus disease 2019 (COVID-19) has posed unprecedented health, social, economic, and ethical challenges in recent times. Lives have been lost and livelihoods disrupted at an exceptional rate. As of 1 February 2022, two years since the World Health Organization (WHO) declared COVID-19 as a pandemic, 440,807,756 people worldwide have been infected with COVID-19, and more than 5.9 million have died.[1] In Malaysia, multiple waves of COVID-19 and its variants have caused more than 33,000 deaths.[2]

Healthcare professionals (HCPs) face a myriad of ethical challenges during the COVID-19 pandemic. In broad terms, these challenges revolve around the questions of how to ethically balance a physician's duties to patients and the wider community and how to distribute scarce resources equitably.[3] Because, as noted by Berlinger, HCPs are trained to care for individuals, the shift from patient-centred

[1]Universiti Malaya, Kuala Lumpur, Malaysia
[2]Department of Medical Ethics & Law, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Jalan Hospital, Selangor, Malaysia
[3]University of Edinburgh, Edinburgh, UK
[4]Monash University Malaysia, Bandar Sunway, Malaysia
[5]Duke-NUS Medical School, Singapore, Singapore
[6]SingHealth Polyclinics, Singapore, Singapore

Corresponding author:
Mark Tan Kiak Min, Department of Medical Ethics & Law, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Jalan Hospital, 47000 Sungai Buloh, Selangor, Malaysia.
Email: marktan@uitm.edu.my

practice to patient care guided by public health considerations creates great tension, especially for clinicians unaccustomed to working under emergency conditions with scarce resources.[4] There have also been concerns with personal safety that HCPs face while delivering care to COVID-19 patients as they have had to take significant protective measures to reduce the risk of getting infected and passing the infection to their loved ones.[5]

Clinical ethics has played a big role in the clinical management of patients during the pandemic – ethicists can identify the values translated from clinical and public health ethics guidance to support and guide healthcare providers and members of the public in pandemic responses.[6] They can also explain shifts in how various values are balanced against each other, with increased emphasis on values such as solidarity, the precautionary principle, reciprocity, and least restrictive means while being inclusive of the contextual details and values of individual patients.[6] As such, clinical ethics support can and has formed an integral part of the response to the challenges faced by HCPs and directly improved the care of patients.

However, beyond providing immediate support, ethicists should also work towards pandemic preparedness and develop sound clinical ethics frameworks for healthcare provision during public health emergencies that balance the patient-centred duty of care (the focus of clinical ethics under normal conditions), with public-health-focused duties. With this in mind, and recognising that although ethical challenges faced by doctors in the Malaysian setting may be similar, there are also likely to be differences in how Malaysian HCPs experience or frame the ethical challenges they face. Also, the means and manner of how they are resolved will be different compared to the experiences of their peers in other countries, as ethical issues are necessarily contextual. To date, there is very limited literature examining the ethical challenges Malaysian doctors face in the clinical setting in general and in particular, the ethical challenges faced during this pandemic. This research aimed to explore the ethical challenges experienced by HCPs in a Malaysian hospital setting during the COVID-19 pandemic so that a context-appropriate and meaningful ethical framework can be drawn up based on well-analysed empirical data.

Methodology

Using qualitative methodology, we explored the clinical ethical dilemmas Malaysian HCPs faced during the COVID-19 pandemic and how they coped with these ethical dilemmas. A descriptive-interpretive approach was used to identify factors that influenced doctors' experiences and decision-making, with the intention of developing an intervention to guide medical doctors in navigating these clinical ethical dilemmas.

In Malaysia, the Klang Valley, comprising the state of Selangor, the Federal Territories of Kuala Lumpur and Putrajaya, was the worst-hit region during the COVID-19 pandemic, with 12 infected cases per 100 people.[7] In order to gain fresh and textured perspectives on the ethical issues faced by Malaysian HCPs during the COVID-19 pandemic, we conducted interviews with a total of 10 HCPs at a tertiary academic healthcare institution in Malaysia between February 2021 and April 2021. Participants were recruited one year into the pandemic. Inclusion criteria included registered medical practitioners[a] working in Malaysia who have managed patients with or suspected of COVID-19 infections. We used a purposive sampling approach to identify participants based on their disciplines and seniority so that diverse clinical ethical challenges were captured. Our participants ranged from medical officers to consultants from primary care, emergency department (ED), infectious disease department, anaesthesiology and intensive care, and social and preventive medicine. Interviewee demographics are summarised in Table 1. A semi-structured interview guide was formulated based on a literature review, decision-making and behavioural theories, and expert discussion to capture the clinical ethics dilemmas encountered by medical doctors and gain insights into how such dilemmas were managed. Individual in-depth interviews also enabled us to elicit the interviewee's own views and descriptions.

All interviews were conducted via video calls which were recorded and transcribed verbatim. The research team comprised a bioethicist, clinical ethicist and qualitative researcher, all with 5 to 10 years of experience in their respective fields. The same interviewers were involved in all interviews conducted to ensure consistency. The interviewers were not employees of the hospital, and the transcriptions were independently checked before analysis using the NVivo software. The interviewers used a standard interview guide with a list of questions (see Supplemental Appendix 1) to interview the participants to ensure that the main topics were covered consistently. Axial coding was then conducted to identify index themes and categories, with an iterative process and comparison across transcripts

Table 1. Interviewee demographics*

Codes	Department	Position
HCP1	Anaesthesiology and Intensive care	Specialist
HCP2	Infectious Disease Consultant	Consultant
HCP3	Primary Care	Specialist
HCP4	Infectious Disease	Specialist
HCP5	Primary Care Consultant	Consultant
HCP6	Emergency Department	Medical Officer
HCP7	Emergency Department	Consultant
HCP8	Emergency Department	Medical Officer

*Medical officers are registered doctors who do not have a postgraduate degree. Specialists are doctors who have postgraduate degrees, whereas consultants are postgraduate specialists with substantial practising experience.

being constantly carried out to ensure the credibility of data. All 10 interviews were analysed in depth, but data from 8 interviewees most relevant to clinical ethics were extracted. Participant diversity in terms of their level of exposure to patients gave rise to different perspectives on the same issue, which will be highlighted in the 'Results' section.

Results

We identified three main themes as discussed below.

1. Deprioritisation of care of non-COVID-19 patients

HCPs struggled with the levels of care they were providing to non-COVID-19 patients because of two main reasons. Firstly, large amounts of resources and workforce were diverted to manage the institution's COVID-19 response, and secondly, the fear of unknowingly treating infectious persons. Three sub-themes were observed in this regard.

a. Compromised management of non-COVID-19 patients

Delay and reduction of services because of limited resources and manpower

Based on the interviewees' experiences, there was a drastic reduction in the services that were available to non-COVID-19 patients, 'we went from 12 lists a day in [the] operating theatre to 3 lists a day' (HCP1).

HCPs wrestled with bad patient outcomes as a result of delays in diagnosis and treatment.

> We feel really bad that services for non-COVID [patients] were disrupted. And you know, now we know that a lot of oncology patients, for example, that diagnosis got delayed, their scans got delayed, the treatments got delayed, a lot of oncology patients died because of the delay. (HCP2)

Regular appointments were repeatedly rescheduled in order to limit the number of patients attending clinics. Concerns were raised about the lack of regular blood tests and patient blood pressure monitoring, which resulted in harm to patients.

> Or probably they come in without any blood test for over the past one year … so we know that patients who have without any chronic kidney disease suddenly turned out this year with a very bad kidney profile and turned out to be a kidney disease. But we have no idea telling why that happened. Because we haven't had a blood test for like, one year plus. (HCP3)

Delay and reduction of services because of fear of potentially infectious patients

In some instances, especially during the early phase of the pandemic, urgent scans and surgeries were delayed because of fears that patients might be infectious, and could jeopardise the safety of HCPs and other patients.

> … Because of the fear of the infectiousness of the disease. An example would be if they needed scans urgently, but there was a fear that this [patient] would be infectious. So they would say wait to rule out the infection first, then we will proceed with the scan … You know, in some cases where surgery is urgent, whether it was, you know, put off a little bit more, even if the benefits outweigh the risks. (HCP4)

b. Curtailed access to healthcare services for non-COVID-19 patients

HCPs had to make difficult decisions in prioritising certain patients or care as a result of limited resources and workforce. HCPs working in the primary care, emergency and intensive care settings were at the forefront of these encounters and expressed unease about certain aspects of triaging.

In the primary care setting, not all patients could be seen in the clinics. In such situations, HCPs had to prioritise which patients to see. Those presenting for regular follow-ups and had no active problems to report – just coming for a renewal of prescriptions or blood test results review – were managed at the front counter without any physical review by the doctors. 'I'll just have a quick look at your blood result. If there is nothing dangerous, then we'll see you another time' (HCP3).

The fact that patients could not have proper follow-up appointments was a cause for distress as one of the HCPs felt that patients often took the opportunity to bring up acute problems during these sessions. 'So, it was very difficult to see, I mean, to do that, because, you know, they might not just come for that [but] they are stopped there' (HCP5).

Apart from concerns about providing suboptimal care for patients by triaging them to care based on blood results, further concerns were raised regarding the quality of the decisions.

> I'm also concerned with how my registrar triages away their patients. I have been seeing about 10 to 15 patients and with the same amount of time, she's already seeing 30 patients. So, whether or not that quality of care is compromised at the outset. You don't know. (HCP3)

In the emergency setting, patients who were not considered at high risk were turned away.

> … the triage officer will explain to them that … your condition is not critical, and it's not an emergency, and we cannot register you. You have to go to other hospital which is available. (HCP6)

Scarce resources meant that patients would, in most cases, be better off in other hospitals because

> there'll be no beds upstairs, they'll have to wait days and days in our emergency department. So risking the benefit, you know, weighing the benefits and risk is a lot better for the patient to go to a place or a different hospital where they do have empty beds, isn't it? Because the wait is less, they'll be seen immediately by a doctor, and care will be given faster compared to our institution. So weighing the risks and benefits, perhaps it is the best choice for the patient. (HCP7)

However, concerns were expressed that patients were harmed in the course of being turned away.

> And with this, there [are] also a few cases who [were] missed and causing mortality, death as well. Where they couldn't register and they waited for so long and the condition deteriorate[d] and then they went home. And also, if not mistaken, there are cases where patient[s] collapse[d]. That means I mean death caused by this as well. (HCP6)

> …having said that, the decision sometimes is made by people who are a bit junior, for example, my registrar. Mistakes have happened in the past where the patient is triage away even though the patient is critical. And something happened to the patient, including mortality. I can't remember the specifics, but I think you know, it brought harm to the patient because we had to push the patient away to a different institution. (HCP7)

Rationing of finite intensive care resources was also a pragmatic consideration. Difficult decisions had to be made in triaging patients who would benefit and had the best chances of survival in the intensive care unit (ICU). Although these decisions were already being made in pre-pandemic situations when intensive care resources were limited, the challenges were more pronounced during the pandemic.

> Sometimes say, for example, we have only three ventilators and 20 patients ... So how do you optimise resources for, you know, for three ventilators and 20 patients needing the ventilator? (HCP7)

> … these are, you know, 80, 90 years old, very poor premorbid, and you feel like they're going to do badly anyway with the COVID. But do I really want to give them an ICU bed, you know, when my ICU beds are so little, so few? (HCP2)

> You do have to put into consideration the age of the patient, the quality of life, the family support, the current condition, the current baseline … to make joint decision whether intubating the patient and reserving a place in ICU is the best use of resources. (HCP7)

c. A trade-off between individual patient safety and protecting public health interests

HCPs struggled with managing the trade-off between individual patient safety and public health interests. This was seen primarily in two situations. First, in the system of triaging patients into green and red (respiratory) zones in the ED. Second, in the delay in executing aerosol-generating procedures in order to don personal protective equipment (PPE).

Segregating suspected COVID-19 patients

Patients with respiratory systems were generally considered as having a COVID-19 infection until proven otherwise – a change in diagnostic approach from systematic reasoning to a 'ruling out' approach. This approach was meant to prioritise the safety of other patients and HCPs, but HCPs expressed discomfort at risking the safety of individual patients by placing them in high-risk areas where they were more likely to be exposed to the virus and more likely to receive suboptimal care.

> At our triage counter nowadays, we are very strict regarding what is the chief complaint … if your presenting complaint is something to do with a COVID symptom, for example, you've got fever, you've got a sore throat and cough, and that is regardless of what your actual complaint is. My point being, if you came for a stomachache, and you have got a bit of cough going on at the side, you are going to be triaged to the respiratory zone. And what that entails is that you will inevitably be placed in the cohort of patients who might or might not have COVID. (HCP8)

> So when we treat them, and we decide that there is a possibility that the patient has COVID, immediately there is a sort of label on their forehead … To be honest, we barely even touch them or administer the ideal 100% treatment … I honestly have to admit that we do not do a lot of things that we do for most patients, for example, we do not order x-rays or we do not do scans for them unless it's really necessary … Are we doing good for the patient at all by cohorting them that way? Or should we have a more ideal and holistic approach to each patient regardless of whether they are suspected or not? (HCP8)

One of the problems highlighted was the difficulty in accurately cohorting patients.

> They are not given any time at all, within five minutes, sometimes even less, they are expected to know exactly what the patient has, and do the correct triaging and cohorting of the patients. But however, that is not the ideal. That's not the adequate amount of time for anyone at all, even the best doctors in the world to do exactly what's going on … Despite the patient not exhibiting any symptoms of COVID, no identifiable risk, we still put a patient in our respiratory zones. (HCP8)

These decisions were not made lightly, and the stress of having to make these determinations was brought to light by the following narrative:

> I had two colleagues that actually got into almost fisticuffs, arguing about a patient [who] was involved in the motor vehicle accident … So happens he's a smoker and has been coughing for quite a while. So what do we say? Do we say to the doctor 'look, you have to take this into your clean zone, and the patient is clearly a smoker – of course he's going to cough' or [do] you put them in the respiratory zone by arguing that the question is, [what if] he turned out to be COVID [positive]. And this is all happening within the first 10 minutes of the patient touching his foot or his stretcher into your emergency department. The patient is in pain, he is bleeding. And both of us are thinking- do we think of the patient first? Or do we think of ourselves and other patients? Because time is such an essence in [the] emergency department– and we sometimes fail to consider the patients, the patient's benefits and needs might be pushed aside just because we have to make these decisions. So that's quite regrettable. (HCP8)

Prioritising safety of HCPs

HCPs interviewed found it distressing when they were unable to immediately attend to patients who needed cardiopulmonary resuscitation (CPR). CPR is a high-risk aerosol-generating procedure, and unless HCPs are appropriately attired, the risk of COVID-19 transmission during the process is high.

> So there will be instances where I feel like, it takes me 10 minutes to wear my PPE. I go to see the patient, I start doing CPR. And by that time, I already know for a fact that the patient is never going to survive. So I was a bit taken aback initially asking myself 'are we doing the right thing?' What is the purpose of us doing CPR after like 15 minutes when the patient is already dead, for example. (HCP8)

This distress was not lessened even when a HCP was able to rationalise the need for prioritising the safety of HCPs.

> … And every doctor or nurse that goes down means that the services gets cut down, and we're going to deny treatment to somebody else … So the first thing that came to mind was when a patient crashes, your first response as a doctor is immediately to go in to try and do something. So we had to overcome that … That means we protect ourselves, then we go in and we try and, you know, do what we can for the patient. It's not easy to do that, because it's going against everything that you have trained for the last you know, in my case, the last 10 to 15 years That you are trying to overcome that you know, to immediately respond. (HCP8)

> We had to think of the most amount of good for the most amount of people, which is the disaster mantra … And at that point, we have to ask ourselves, for example, when we first started having COVID tents, and COVID decontamination segregated areas, we have patients coming in who require CPR … We have to think if I go in there, if I start doing CPR early, I might expose myself and subsequently all my friends. I might risk quarantining my entire department. And hence, to save that one patient, I have neglected care to the hundreds that might come after that. So I feel like it's a personal ethical challenge for me to decide what is the best for this one person versus the potential many that will come after. (HCP8)

2. Disempowerment of patients – exclusion from cohorting decisions and information

During the pandemic, many decisions were taken out of the hands of patients. Non-COVID-19 patients were subjected to delayed or cancelled appointments, diagnostic procedures, interventions, and treatments. People were turned away from the ED. Non-COVID-19 patient care was compromised due to the system being overwhelmed by managing COVID-19 patients.

One particular aspect of disempowerment was raised in the context of cohorting patients in the ED. As noted above, the cohorting of patients into the respiratory zone was both difficult to ascertain with accuracy and time-sensitive. These decisions were made quickly and were based on non-ideal information. More importantly, placing individuals in these zones subjected them to a higher risk of infection and suboptimal care. One of the HCPs reflected on this:

> …When we cohort those patients, do we inform them that they will be placed in the cohort of COVID suspected patients? … we do not inform the patient[s] enough for them to understand that this is what we are doing in

> emergency. And I don't think that the patient[s] [are] even aware that they are entitled to ask this question, 'Why are you placing me in a respiratory zone?' I mean, we do inform them to a certain extent that 'look, you are having a fever, you're having a bit of cough, and you'll be put among patients who have the same symptoms as well'. But whether they understand enough to understand the ramifications of that- I'm not really sure to be honest. (HCP8)

Concerns were raised not only that patients were not routinely allowed to opt out and seek treatment at a different facility, but also were not fully informed of isolation procedures and the reasons and risks of being cohorted to the respiratory zone.

> And I don't think that they're aware that they have a choice to say no. And it all depends on whether we as doctors and medical assistants and nurses at a triage counter, whether we are concerned enough to inform them that this is what they're getting into. And they have the choice to say no, and you can opt out. But I would say very few of us do that. And it's not often the fault of my colleagues as well. Sometimes we just simply cannot. We do not have the time and resources, for example, to adequately explain each and every word to each and every one of them. (HCP8)

A specific example of a patient refusing to allow his child to be put in the respiratory zone was offered.

> A 13-year-old child came in for suspected dengue fever. So in normal times, we would do some investigations for that patient, we might start some drips and treat the patient. But if the patient has a slight, sore throat, a tad bit, of course, we will unfortunately have to put [this patient as] a high risk patient along with all these COVID suspected patients as well … And sure enough, as any father would do, he said no, I'm not putting my child under that risk, it seems like the cure is worse than the disease itself … the patient ended up getting treatment in another facility where she was treated as outpatient. (HCP8)

> I've been to a few hospitals, visiting a few different emergency departments to see how they work. And I find some concern, everyone is doing the same- cohorting respiratory and non-respiratory zones. So what I meant is that perhaps it'd be better if there is something better to inform us that 'look, before you put the patients in a COVID zone, you are required to inform them that they are going there and at least obtain a verbal consent'. Maybe that'll be better for the patients, it might be tricky for our job. I totally expect them to be making complaints from our own staff and frontliners regarding the extra workload, probably the extra time. But maybe that is for the better of the patients, at least, I would expect not many of them to say no, but at least they are aware. And I will also say that maybe once they are aware, if unfortunately, they do contract COVID from I don't know, maybe the patient to the next bed of them, maybe it's a bit easier for us to explain to them. Look, we have informed you that it's a risk there. And maybe in other countries, we might be liable to litigation, for example, and maybe this is a way to avoid that. (HCP8)

3. HCPs' conflicts between professional duties and personal obligations

As HCPs navigated patient care during the pandemic, HCPs faced challenges in ensuring their safety and protecting their vulnerable loved ones. Although the experiences described by HCPs did not directly impact the delivery of clinical care, HCPs interviewed expressed internal conflicts while balancing professional duty of care against genuine concerns of contracting COVID-19 and spreading it to family members.

> The first time I was intubating a patient with COVID, I was, I was, what is it called? I had tremors, you know, because the only thing separating myself and the patient with the COVID particles was just a thin mask, you know, that was the only thing separating me and the patient. So I really felt like my life was in danger. (HCP7)

> … it was very scary. Once you get used to it, it's okay – especially going back home as well seeing your family. I always tell my daughter 'okay, do not hug me first, do not touch me until I have taken a shower'. I'm going to remove the clothes as well put on clean clothes and everything. So especially thinking that is risky not only [for] you but your family. (HCP7)

> We try not to expose ourselves too much. We did not want to bring back the infection to our family. (HCP6)

Discussion

Our study provides insights into the various clinical ethical dilemmas HCPs faced during the pandemic, in particular, the difficulties in balancing beneficence and non-maleficence while attempting to uphold justice and equity for all patients. Issues regarding the personal safety of HCPs were raised as there was a need to preserve workforce well-being and maintain clinical utility. Patients were also disempowered, and there were difficulties in maintaining patients' autonomy during the pandemic.

1. Beneficence and non-maleficence

Research has shown that postponement of elective surgeries, even for non-lethal conditions, could lead to a

detrimental downstream effect of significant morbidity and mortality.[8] For instance, a cancer patient's disease may undergo adverse changes in prognosis if his or her surgery is postponed for a significant period of time.[9] Similarly, Rosenbaum provides various real-life examples highlighting that the definition between urgent and non-urgent interventions can only be drawn upon retrospective consideration and review.[10] Nonetheless, within the context of a resource-limited healthcare setting and in the interest of supporting a broader pandemic response, HCPs are forced to risk stratify and prioritise certain groups of patients. Although there is a robust utilitarian consideration in a pandemic to do the most good for the most number of people,[11] a certain group of patients or certain aspects of care, for example, non-COVID care for COVID-19 patients may be excluded or compromised. Hence, challenging ethical and clinical decisions lurk behind this seemingly straightforward notion.[b]

With the healthcare system overwhelmed by the COVID-19 pandemic, the precept of 'do no harm' encoded in the Hippocratic Oath took a definitional detour and, thus, evolved to embody the concept of 'do maximal good'.[12] As demonstrated in the interviews, HCPs have faced challenging clinical dilemmas, especially when harm to the patient has inevitably ensued from reducing the number of elective surgeries, rescheduling patients' appointments successively, and diverting patients to other healthcare facilities. Furthermore, the influx of patients to healthcare institutions with limited functional capacities has caused conflicts between doing what is right and what is best for patients. The role triaging played in minimising these risks to patients cannot be understated. In the interviews, two HCPs highlighted the reality of how clinical experience and seniority level influence the discharge or admission disposition decisions, as inadvertent errors may place patients at risk of adverse events.

From this research, a deviation from the standard of care was perceived as unavoidable and posed a significant dilemma amongst HCPs. In formulating a sound ethical and governing framework for future pandemic preparedness in Malaysia, there is a need to recognise that in emergency situations when resources are limited, the notion of 'standard of care' may be subjected to diminution. It is, therefore, prudent to minimise harm by having clear guidance and ensuring sufficient supervision in triage.

2. Justice/equity for non-COVID-19 patients

The scarcity of medical resources creates conflict between respecting patients' equal rights and maximising benefits for both COVID-19 and non-COVID-19 patients. Savulescu et al.[11] have argued that 'there are no egalitarians in a pandemic', and it is impossible to treat all citizens equally given the magnitude of strain on health systems and the public policy challenges presented by the COVID-19 pandemic. This would mean an inescapable need to prioritise certain groups of patients over others. From our research, it was clear that some of the dilemmas faced by HCPs stemmed from having to limit non-COVID-19 patients' access to the degree of healthcare they would have received pre-pandemic.

A retrospective observational analysis done in Italy showed reduced ED visits and hospitalisations for non-COVID-19 patients during the first months of the pandemic.[13] More worryingly, there has been a significant increase in non-COVID-19 out-of-hospital mortality due to neoplasms, cardiovascular and endocrine system diseases.[13] Although there is still a paucity of such local Malaysian data, anecdotal examples given by HCPs from this research highlighted the issue of justice and equity for non-COVID-19 patients during the pandemic. Furthermore, limitations in capacities had caused diagnostic and treatment delays. As a result, HCPs have had to realign their standards in clinical practice and practice in ways contrary to what they had considered ideal.

As part of future pandemic preparedness and response plans, further investigations into the long-term effects of the pandemic on non-COVID-19 patients would be prudent in ensuring a sound ethical framework in the allocation of medical resources during times of scarcity so that harm to patients can be minimised.

3. Prioritisation protection of healthcare workers – clinical utility

COVID-19 has exposed health workers to extraordinary amounts of physical and psychological stressors such as long working hours and constant fear of disease exposure.[14] In order to maintain a viable and healthy workforce during this pandemic, much emphasis was placed on ensuring HCPs' personal safety by providing an adequate supply of PPE and ensuring the proper donning of PPE before patient contact.

One of the inherent ideals in medical practice is to uphold a duty to treat – and when it comes to performing life-saving CPR, healthcare workers are trained to start resuscitation immediately. Nevertheless, during this pandemic, HCPs have had to construct, adopt and accept standards of clinical care that might differ radically from their usual norms. To illustrate this point, one of our interviewees has raised concerns about a delay in CPR commencement to make time to don PPE.

In emergencies, HCPs need to balance the need to provide good care and maintain clinical utility by having enough HCPs in the workforce. Besides ensuring that all HCPs are well trained in using PPE, having personnel on standby with PPE might help reduce the time lag in commencing life-saving procedures.

4. Disempowerment of patients – patient autonomy

One of the most fundamental principles in clinical ethics is respecting patients' autonomy. However, considering the limited resources during a global pandemic, respecting autonomy cannot be absolute. In the early stages of the pandemic, when COVID-19 confirmatory testing had a longer turnaround time, the degree of uncertainty that resulted from delayed diagnostic capability resulted in HCPs' inability to make decisive clinical decisions. As a result, HCPs resorted to risk stratifying patients with varying symptoms into different cohorts to reduce the risk of possible COVID-19 transmissions to other patients. Based on our interviews, patients were not routinely given explanations of the possible risks of contracting COVID-19 due to HCPs' cohorting decisions when attending the ED. Furthermore, given the limited bed capacity of the healthcare institution, patients occasionally spent a long time in the ED, thus possibly increasing the risk of contracting hospital-acquired COVID-19 infection.

In the UK, research has shown that an estimated 6.8% (95% confidence interval 6.7–7.0) of all patients with COVID-19 had nosocomial infections, with a peak of 8.2% (7.0–9.6) of patients having nosocomial COVID-19 infections in mid-May 2020.[15] Although there is a dearth of actual data on hospital-acquired COVID-19 infections locally, HCPs were reasonably concerned regarding the lack of explicit disclosure of such risks to patients. The lack of disclosure was attributed to time constraints and to a lack of choice, especially if patients required further admission and treatment despite the risks.

The ethical challenges faced by HCPs in Malaysia during the COVID-19 pandemic were unfamiliar to most HCPs as they had never previously experienced patient management in a rapidly evolving public health crisis. Our research showed that the wide-reaching need to deprioritize care of non-COVID-19 patients, such as limiting access to healthcare services and having to trade-off between individual safety and protecting public health interests, were novel challenges to most Malaysian HCPs. The inevitable need to compromise aspects of patient care that contradict the usual standard precipitated ethical dilemmas amongst HCPs.

Some of these challenges were similar to those reported in Italy, where outpatient practices and healthcare services such as planned hospitalisation and elective surgeries were substantially limited, given the rising COVID-19 infections.[16] The difficulties faced in rationing resources in ICU in conditions of extreme scarcity were also similar to the experiences reported in France, which necessitated the adaptation of a prioritisation strategy. [17] Our study has shown that in a local Malaysian healthcare institution, the rapid transition to prioritise the public rather than benefiting individual patients caused significant personal and professional distress to HCPs. Although guidelines are available,[18,19] centre-specific and contextualised ethical guidance were not widely adapted, and there is a paucity of data on the extent of guideline utilisation in clinical practice. In attempting to balance patient-centred duty of care with public health-focused duties, it is imperative to reflect and analyse the experiences of HCPs on the ground to supplement and refine existing clinical ethics frameworks.

Limitations

Our study was a single-centre study based in a major academic tertiary hospitals in Malaysia that provides healthcare services covering all major clinical subspecialties. As such, a more comprehensive clinical support system is available for doctors compared to rural hospitals or other non-university-affiliated healthcare institutions. Thus, other potential issues that may have arisen in rural hospitals and other healthcare institutions would not have been captured within the scope of this research. Furthermore, variables of legal, cultural and societal specificities may influence the ethical perception of HCPs from different parts of the world. Therefore, it would be necessary to extend the research to other healthcare institutions within the nation, and in the region to better understand the clinical ethics issues from a wider and more holistic perspective.

Conclusion

Our findings highlighted some of the issues HCPs faced during the pandemic in Malaysia. The finding underscores the need for an ethically grounded and operationally efficient clinical ethics consultation service in hospitals, especially in developing countries.

Acknowledgements

We extend our gratitude to all participants who have generously given their time to be interviewed. We are grateful to Nor Syahirah Binti Nor Azwar for research assistance during the recruitment and data collection phase of the project.

Authors' contributions

SK as principal investigator, led the study conceptualisation, design of the research, data collection, data analysis, writing and editing of the manuscript. MTKM was involved in the study conceptualisation, design of the research, data collection, data analysis and editing of the manuscript. SHN was involved in data analysis, literature review, writing and editing of the manuscript. CJN was involved in the study conceptualisation, design of the research, data analysis and editing of the final manuscript. All authors reviewed and approved the final manuscript.

Availability of data and materials

Reasonable requests for the data generated or analysed from this study may be directed to the corresponding author.

Consent for publication

Participants gave consent to use de-identified data in both scholarly publications and presentations.

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics approval and consent to participate

We obtained the requisite ethics approvals from the University of Malaya Medical Centre Research Ethics Committee (MREC ID No. 2020922-9091). Written informed consent was obtained from participants.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Universiti Malaya COVID-19 Related Special Research Grant (UMCSRG) (grant number CSRG004-2020ST).

ORCID iDs

Mark Tan Kiak Min https://orcid.org/0000-0003-2075-0223
Shu Hui Ng https://orcid.org/0000-0002-0439-4903

Supplemental material

Supplemental material for this article is available online.

Notes

a. Registered medical practitioners under the Medical Act 1971.
b. The Malaysian Bioethics Community's document suggests many potential solutions to these ethical problems.

References

1. WHO Coronavirus (COVID-19) Dashboard. https://covid19.who.int/ (2022, accessed 6 March 2022).
2. Ministry of Health. COVID-19 deaths in Malaysia. https://covidnow.moh.gov.my/deaths (2022, accessed 6 March 2022).
3. Gostin LO, Friedman EA and Wetter SA. Responding to COVID-19: How to Navigate a Public Health Emergency Legally and Ethically. *Hastings Center Report* 2020; 50(2): 8-12. DOI: 10.1002/hast.1090.
4. Berlinger N, Wynia M and Powell T, *et al*. Ethical Framework for Health Care Institutions Responding to Novel Coronavirus SARS-CoV-2 (COVID-19). New York: The Hastings Center; 2020. Available from: https://www.thehastingscenter.org/wp-content/uploads/HastingsCenterCovidFramework2020.pdf.
5. Donkers MA, Gilissen VJHS, Candel MJJM, *et al.* Moral distress and ethical climate in intensive care medicine during COVID-19: A nationwide study. *BMC Med Ethics* 2021; **22**(1): 73. DOI: 10.1186/s12910-021-00641-3.
6. Warren M. Roles for ethicist in COVID-19 response. Canadian Bioethics, Community, Privacy and Trust, Public Health. https://impactethics.ca/2020/03/18/roles-for-ethicists-in-covid-19-response/ (2020, accessed 14 February 2022).
7. Ministry of Health. COVID-19 cases in Malaysia. https://covidnow.moh.gov.my/cases (2022, accessed 16 February 2022).
8. COVIDSurg Collaborative. Elective surgery cancellations due to the COVID-19 pandemic: Global predictive modelling to inform surgical recovery plans. *Br J Surg* 2020; **107**(11): 1440–1449. DOI: 10.1002/bjs.11746.
9. Brown NJ, Wilson B, Szabadi S, *et al.* Ethical considerations and patient safety concerns for cancelling non-urgent surgeries during the COVID-19 pandemic: A review. *Patient Saf Surg* 2021; **15**(1): 19. DOI: 10.1186/213037-021-00293-7.
10. Rosenbaum L . The untold toll – the pandemic's effects on patients without Covid-19. *N Engl J Med* 2020; **382**(24): 2368–2371. DOI: 10.1056/NEJMms2009984.
11. Savulescu J, Persson I and Wilkinson D. Utilitarianism and the pandemic. *Bioethics* 2020; **34**(6): 620–632. DOI: 10.1111/bioe.12771.
12. Holmes Jr DR, Stefanini GG, Durand-Zaleski I, *et al*. From 'Do No Harm' to 'Do Maximal Good': an evolving concept. *Eur Heart J* 2020; **41**(34): 3217-3218. DOI: 10.1093/eurheartj/ehaa406.
13. Santi L, Golinelli D, Tampieri A, *et al.* Non-COVID-19 patients in times of pandemic: Emergency department visits, hospitalizations and cause-specific mortality in Northern Italy. *PLoS One* 2021; **16**(3): e0248995. DOI: 10.1371/journal.pone.0248995.
14. World Health Organization https://www.who.int/news/item/17-09-2020-keep-health-workers-safe-to-keep-patients-safe-who (2020, accessed 19 February 2022).
15. Read J, M, Green CA, Harrison EM, *et al.* Hospital-acquired SARS-CoV-2 infection in the UK's first COVID-19 pandemic wave. *Lancet* 2021; **398**(10305): 1037–1038. DOI: 10.1016/S0140-6736(21)01786-4.
16. Ferorelli D, Mandarelli G and Solarino B. Ethical challenges in health care policy during COVID-19 pandemic in Italy. *Medicina (Kaunas)* 2020; **56**(12): 691. DOI: 10.3390/medicina56120691.
17. Robert R , Kentish-Barnes N, Boyer A, *et al.* Ethical dilemmas due to the Covid-19 pandemic. *Ann Intensive Care* 2020; **10**: 84. DOI: 10.1186/s13613-020-00702-7.
18. Tan HS and Tan MKM. *Bioethics & COVID-19: guidance for clinicians* [Internet]. Kuala Lumpur: Malaysian Bioethics Community; 2020. DOI: 10.5281/zenodo.3821126.
19. World Health Organization. *Guidance for managing ethical issues in infectious disease outbreaks [Internet]*. Geneva: World Health Organization, 2016. Available from: https://apps.who.int/iris/handle/10665/250580.