

Ethical uncertainty and COVID-19: exploring the lived experiences of senior physicians at a major medical centre

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ABSTRACT

Given the wide-reaching and detrimental impact of COVID-19, its strain on healthcare resources, and the urgent need for—sometimes forced—public health interventions, thorough examination of the ethical issues brought to light by the pandemic is especially warranted. This paper aims to identify some of the complex moral dilemmas faced by senior physicians at a major medical centre in Saudi Arabia, in an effort to gain a better understanding of how they navigated ethical uncertainty during a time of crisis. This qualitative study uses a semistructured interview approach and reports the findings of 16 interviews. The study finds that participants were motivated by a profession-based moral obligation to provide care during the toughest and most uncertain times of the pandemic. Although participants described significant moral dilemmas during their practice, very few identified challenges as ethical in nature, and in turn, none sought formal ethics support. Rather, participants took on the burden of resolving ethical challenges themselves—whenever possible—rationalising oft fraught decisions by likening their experiences to wartime action or by minimising attention to the moral. In capturing these accounts, this paper ultimately contemplates what moral lessons can, and must be, learnt from this experience.

INTRODUCTION

There has been a recent upsurge in scholarship relating to the newly identified SARS-CoV-2, causing COVID-19. As the global community confronted an unknown and rapidly spreading threat, researchers raced to better understand COVID-19, and to develop effective therapeutic and preventive measures. Given its wide-reaching and detrimental impact, its strain on healthcare resources, and the urgent need for—sometimes forced—public health interventions, thorough examination of the ethical issues associated with COVID-19 is especially warranted. Moral dilemmas identified during the healthcare response to the pandemic include fair allocation of scarce resources, timely delivery of care—particularly to marginalised groups, those with disabilities or others with specific requirements or difficulty accessing healthcare—balancing society's economic and educational needs with its healthcare needs, and attention to the pandemic's impact on the physical, psychological and social health of both healthcare workers (HCW) and the greater population.^{1–6}

In Saudi Arabia, a country which continues to confront a different—equally serious—epidemic, the Middle East respiratory syndrome coronavirus (MERS-CoV) the response to COVID-19 was swift, practised and efficient.^{7,8} Virus containment plans took immediate effect; international and domestic travel was suspended, 24-hour curfews were implemented, and entire cities entered locked down.⁸ This response was accompanied by the mobilisation of command centres, the preparation of healthcare facilities, the obtainment of resources, and the establishment and implementation of practice guidelines.⁸ As additional efforts were directed towards advancing clinical and scientific research, however,⁸ the ethical challenges of the pandemic remained largely unexamined. This finding is, to an extent, unsurprising. Bioethics is still very much a novel discipline in Saudi healthcare with limited scholarship, training or practice opportunities.⁹

This paper aims to identify some of the ethical challenges posed by COVID-19 in Saudi Arabia. It attempts to gain a deeper understanding of the complex moral dilemmas faced by senior physicians, and of how they navigated ethical uncertainty during a time of crisis, particularly absent formal ethics support. In capturing the lived realities of senior physicians at a major medical and academic centre in Riyadh, Saudi Arabia—King Saud University Medical City (KSUMC)—this paper ultimately contemplates what moral lessons can, and must be, learnt.

BACKGROUND

SARS-CoV-2 was first identified in January 2020, and formally declared a global pandemic by the WHO 2 months later.^{10,11} Worldwide, healthcare systems prepared for increased patient volume and complexity, improved protection and support for HCWs, contemplated the ethical allocation of resources, and implemented transparent communication policies.¹²

In Saudi Arabia, the emergence of COVID-19 was overshadowed by the ongoing MERS-CoV epidemic.¹³ Since its identification in 2012, MERS-CoV has caused numerous nosocomial outbreaks associated with high mortality rates, and has warranted a comprehensive healthcare response.^{14–20} In 2015, a nosocomial MERS-CoV outbreak at KSUMC infected 10 patients and 13 HCWs, and resulted in 8 deaths.²¹

Saudi Arabia's experience with MERS-CoV expedited its readiness for COVID-19, and a robust response began with the identification of the first confirmed case in March, 2020.²² By the time the first infection was identified at KSUMC a few weeks later, multiple institutional response plans were already in effect.²³ Between March and August, 3315 KSUMC patients contracted COVID-19, 704 requiring hospitalisation. Despite preparedness, 49 HCWs also acquired the infection.^{24 25} During this period, 28% of all hospitalised COVID-19 patients required intensive care unit (ICU) admission, and 14% required mechanical ventilation. Mortality was reported at 16%.²⁶ In the absence of effective treatment and ample resources, HCWs were clinically and ethically challenged by the large influx of critically ill patients and remained so until the vaccination roll-out in December 2020.²⁷

This study commenced approximately 8 months after the initial pandemic peak; both new infections and hospitalisations were at a steady nationwide decline. Regular healthcare practice at KSUMC had resumed. Similarly, public health measures had gradually been eased, and Saudi society had returned to its usual function. Still, mandated masking and vaccination ensured that the pandemic was not forgotten. This was an interesting time to conduct a study; the stresses of a public health emergency had lessened significantly, yet the experiences of participants were still recent, and enough time had passed for them (and the authors) to adjust to, and reflect on, living with COVID-19.

METHODS

This interdisciplinary bioethical research attempts to gain a better understanding of the lived experiences of senior physicians during the COVID-19 pandemic, through the identification of ethical challenges and participants' responses to moral uncertainty. The study uses a semistructured interview approach following an interview guide (online supplemental appendix A). Key topics included clinical experiences, perceived challenges and personal reflections. Terms such as 'ethics' and 'moral conflict' were further clarified when necessary. The guide was continuously revised and refined in accordance with feedback and emerging themes. Researchers sought to identify a purposeful participant sample by adopting a snowball technique.²⁸ Sampling and data analysis occurred simultaneously to achieve theme saturation.

Recruitment

One research team member (MB), having authoritative knowledge with KSUMC's COVID-19 response, compiled a list of potential participants identified as senior physicians involved in the immediate healthcare response, and who had decision-making authority—either in a clinical or an administrative capacity. Participation was limited to senior physicians due to the study's interest in identifying the ethical challenges experienced by those with the most responsibility and accountability.^{29 30} Participants were invited to enrol by (RM) until theme saturation was achieved. Although the research team is also employed by KSUMC participants had no working relationships with RM, and none had knowledge of their nomination by MB, ensuring personal relationships did not affect participation. Both verbal and written consent was obtained before each interview.

Data collection

An interview guide was developed in accordance with the widely cited qualitative framework by Kallio *et al*,³¹ and consisted of both structured and semistructured questions (online

supplemental appendix A). These were designed to reflect current ethical discourse on the pandemic, published findings on caring for patients during times of crisis^{1-4 32-36} and the varied expertise of the research team. Structured questions focused on demographic data including role, position and area of coverage. Semistructured questions attempted to identify ethical challenges faced by participants, and to gain a better understanding of how they navigated ethical dilemmas.

Interviews took place between December 2020 and March 2021. A video conferencing platform was used due to pandemic precautions. RM, a formally trained bioethicist, conducted the interviews with support from (RA and LeA), research members with formal expertise in qualitative research methods. Although interviews were conducted in English for ease of transcription, participants were encouraged to speak in Arabic—their native language—anytime they preferred. Most participants chose English resulting in a limited proportion of data requiring translation. Two bilingual team members (LyA and RF) transcribed the interviews.

Transcripts were pseudonymised to ensure confidentiality, with only (RM) having access to the identifier. They will remain stored in a password-protected computer hard drive for 5 years, after which they will be adequately deleted. Similarly, all recorded interviews were encrypted and were only accessible for transcription and analysis purposes.

Data analysis

Data gathered from structured questions were summarised using descriptive statistics. Responses to semistructured questions were analysed through rigorous inductive thematic analysis,³⁷ including independent reading and code generation, and continuous comparison and deliberation. RM, RA and LeA analysed four transcripts independently and met four times to deliberate coding. The remaining 12 were equally split between RA and LyA for independent coding using the qualitative software programme Dedoose³⁸; RM reviewed this coding for consensus, and the final coding schema was applied to all transcripts. Two separate meetings were held between RA and RM, and LyA and RM to reconcile differences and reach further consensus. From coding, emergent themes were identified.

RESULTS

Participant description

The total number of potential participants contacted was 28. Of those, 4 did not respond or didn't fit inclusion criteria, 7 agreed to an interview but never confirmed availability and 16 completed the interview. All participants were above the age of 35; most were male, worked in a clinical capacity, and had administrative authority (table 1). Results uncovered a common moral experience among participants with comparable approaches to ethical dilemmas. All participants reported experiencing fear and anxiety in response to an unknown virus. They shared similar adaptation and learning experiences, and described parallel moral challenges, rationalisation and coping techniques, and thoughtful reflections. Interview data generated four interlinked themes: (1) 'early pandemic experiences', (2) 'ethical challenges', (3) 'rationalisations' and (4) 'reflections', and 12 associated subthemes.

Theme 1: early pandemic experiences

The initial weeks of the pandemic revealed a common experience that can be understood within two subthemes: (1) 'dealing with the unknown' and (2) 'learning and adapting' (table 2).

Table 1 Participant characteristics (n=16)

Characteristic	N
Gender identity	
Male	11
Female	5
Role	
Clinical	8
Combined clinical and administrative	6
Administrative	2
Management position	
None	2
Lower (eg, section head)	9
Middle (eg, department chair)	3
Upper (eg, senior hospital administrator)	2
Area of coverage	
In-patient (wards and ICU)	8
Outpatient	2
Inpatient and outpatient	3
Emergency department	3
ICU, intensive care unit.	

Dealing with the unknown

All participants described varying degrees of confusion, fear and anxiety during the early phases of the pandemic. They reported limited—and at times—contradictory information about the nature of the virus, preventive measures and therapeutic interventions.

Learning and adapting

Participants modified both their personal and professional practice in order to adapt, and sufficiently respond, to a growing healthcare challenge. This included a newfound reliance on technology in communication with patients, colleagues and trainees.

Theme 2: ethical challenges

In describing their experiences during the peak pandemic months, participants identified ethical challenges across four distinct subthemes: (1) ‘personal’, (2) ‘clinical’, (3) ‘professional’ and (4) ‘organisational’ (table 3).

Personal ethical challenges

Participants reported difficulty in balancing care commitments to patients with personal commitments to others. While acknowledging their professional responsibilities, participants also

feared contracting COVID-19, and potentially transmitting the infection to their loved ones. A few participants also expressed challenges in ensuring the safety and well-being of practitioners under their supervision.

Clinical ethical challenges

Most identified ethical challenges were of a clinical nature. These included accepting unfamiliar clinical roles, opposing current guidelines and making decisions regarding ICU admission and do not resuscitate (DNR) orders.

Professional environment ethical challenges

Similarly, participants reported several ethical challenges in their professional relationships and environments, including a lack of collegiality and a deliberate avoidance of responsibility by other physicians. In contrast, nurses were reported by some participants to have little agency or choice over which areas to cover and were reportedly ostracised by colleagues due to their close contact with COVID-19 patients.

Organisational ethical challenges

Participants who held additional administrative roles described frustration with practitioners who avoided responsibility. Still, they recognised the lack of resources as a valid reason to refuse to see patients, and several recalled shortages in personal protective equipment (PPE), isolation facilities and respiratory support machines. Absent resources and ample protection, participants described challenges in making decisions or creating institutional policies independent of national guidelines. Notably, prior experience with MERS-CoV was noted by some to have been especially helpful.

Theme 3: rationalisation

Participants appeared to navigate ethical challenges by consciously rationalising responses to complex moral dilemmas. Participants’ reasoning can be understood across three subthemes: (1) ‘heroic identification’, (2) ‘internal moral struggle’ and (3) ‘medical-moral distinction’ (table 4).

Heroic identification

Participants recalled feeling morally obligated to provide care, even in the face of growing uncertainty and significant risk. Several participants used distinct military terminology, likening the pandemic to a ‘war’ and themselves to ‘soldiers’ and ‘heroes’.

Table 2 Early pandemic experiences, total count: 184

Count	Subthemes	Illustrative quotes from participants
60	Dealing with the unknown	<ul style="list-style-type: none"> ▶ ‘I think the main concern was with the unknown. [The virus] is new so there wasn’t much knowledge about how to deal with it, how to treat patients, how dangerous it was. All these things were kind of stressful.’ -P8 ▶ ‘Many changes in policies and process flow. That created a lot of confusion for frontline practitioners because every couple of days there is, like, a change in policy that we might not have been informed about until it got implemented.’ -P6 ▶ ‘In the ER [Emergency Room], how anxious they are about handling patients suspected to have COVID, how anxious they are about moving the patient from area A to area B for assessment.’ -P1
83	Learning and adapting	<ul style="list-style-type: none"> ▶ ‘We learned through time everything, basically. There were a lot of rules, new rules and regulations and everything. It’s not just about wearing the proper PPE and having the proper criteria, it’s a lot of other logistics.’ -P2 ▶ ‘Everyone knows that there is a job that has to be done.’ -P5 ▶ ‘Some [patients] would have difficulty communicating with family virtually over the phone or over video call, so that was very stressful ... I remember one time, one of my patients was in the ICU and I had to contact her [children] to let them know her condition. They hadn’t heard from her for probably 4–5 days and everyone was in tears and it was quite dramatic. I had to put my phone in a plastic bag and walk into the ICU [so they could video call].’ -P1

Table 3 Ethical challenges, total count: 248

Count	Subthemes	Illustrative quotes from participants
54	Personal	<ul style="list-style-type: none"> ▶ 'I think if you [ask] me the most challenging [experience] is seeing a lot of sick people and going home fearing that you are [going to] take the virus to your family. So, that was really the worst thing. You feel bad [that] your kids have to be under risk because of your job.' -P10 ▶ 'I lived alone the first 2–3 months. I was isolating from my family. Everyone was so scared.' -P14 ▶ 'You know I was almost living a double life.' -P4 ▶ 'Two of my team [members] contracted the infection. I felt so bad honestly that day. I felt so bad and I was asking myself was it the way we, you know, by which we were, you know, rounding on the patients? Did we get close to each other without taking precautions? Being the leader, you would ask yourself, you would feel guilty about that.' -P9
99	Clinical	<ul style="list-style-type: none"> ▶ 'You start signing more DNRs, and at some point, you ask yourself am I doing the right thing? You are not thinking much about it and when you go [home] you start, how come I signed like two, three DNRs in a shift?' -P10 ▶ 'It's a hard decision. You see a patient in cardiac arrest, you [can't perform] CPR because you don't have N95 masks, or you don't have PPEs. You feel guilty for letting this happen. The justification obviously is the safety of your team, the safety of yourself, family and loved ones.' -P8 ▶ 'We were involved in ICU, we are not 100% qualified to lead care in that area but we were in a very difficult and tight situation ... we accepted as Internists to do a job that we are not experienced in for the sake of patients.' -P9 ▶ 'Steroids, which in recent literature, was debated and actually discouraged, but you know, I had to do something for my patients so... in that aspect I'm trying to, you know, make my patients better. I'm one of those who started this regimen of giving high dose steroids.' -P4
17	Professional environment	<ul style="list-style-type: none"> ▶ 'We talked about the importance of shaving, but [a few residents under my supervision] were not convinced. We said you will not see patients in the Emergency [Room] and they were ok with that! Maybe when I was younger, I would have felt the same but religious necessity permits prohibitions. One said something weird: 'It's not my fault. It's the fault of the hospital. They should provide me PAPR [Powered Air Purifying Respirators] so I don't have to shave.' Do you understand? He threw responsibility on the hospital, not on the hard situation we are in.' -P9 ▶ 'Okay I understand you're afraid of seeing that patient, but this is your job, this is something that you signed up for so you should not... as long as you're protected and doing the right thing then you should not be avoiding seeing patients.' -P8 ▶ 'I'll be honest with you. I am ashamed for those who were running away... Just leave it for the others, just leave it for the service, I am sorry, I didn't become a physician to be like this.' -P15 ▶ 'You see your nurses suffering as everyone is avoiding them as if they already have something that could impact everyone's health.' -P1
78	Organisational	<ul style="list-style-type: none"> ▶ 'Managing people is tough... Managing expectation is really tough.' -P12 ▶ 'At one point we had to say we may suspend your practice for one year if you are not going to see patients. That means you are not doing your job.' -P9 ▶ 'We have provided you with fit testing, the N95 mask is available, the goggles are available, the PPE is available. You know what? You are a doctor, you have to provide care, as long as we have provided you with the PPEs and the guidance, then you're committed because you are an employee of the hospital, you are a doctor, this is your job. And nobody said that being a doctor doesn't have its risks.' -P11 ▶ 'I think we learned as time passed. We learned a lot and we made a lot of decisions on the fly which is typical crisis management. You don't need a lot of information, to wait for all the information that you need to make a decision, you just call the shot and then deal with the consequences ... to make sure people they feel that they're taken care of, they are my primary focus, their safety.' -P12

Internal moral struggle

Participants described overwhelming internal moral struggle when faced with ethical uncertainty, and reported several mitigating responses including avoidance and shifting blame. Some also reported discomfort with ethical decision-making.

The medical-moral distinction

Few participants prioritised the medical aspects of patient care over its moral components, which they did not consider as essential, seemingly as a way of avoiding ethical conflict.

Theme 4: reflections

Participants shared thoughtful reflections on what the pandemic taught them about themselves and others. These are illustrated

across three subthemes: (1) 'pandemic', (2) 'personal' and (3) 'people' (table 5).

On the pandemic

Participants viewed the pandemic as a learning experience that helped them grow both as practitioners and as persons. Some noted the fragility of the healthcare system, while others expressed a newfound appreciation for life.

On the personal

Several participants reflected on their own mortality, death in general and preparing for the unexpected. Others reflected on their newfound strengths and abilities.

Table 4 Rationalisation, total count: 40

Count	Subthemes	Illustrative quotes from participants
21	Heroic identification	<ul style="list-style-type: none"> ▶ 'This is my time. This is our time as physicians. We are the main soldiers here.' -P15 ▶ 'In the end I believe that it is a crisis like in a war; somebody has to be the leader, and the last thing you want to do as a leader is to punish one of your foot soldiers.' -P12 ▶ 'I was [seen as] a hero because I volunteered early on.' -P1
5	Internal moral struggle	<ul style="list-style-type: none"> ▶ 'I called the ICU staff and I told him in usual circumstances I wouldn't sign a DNR [order] for this patient. But in this situation, I would say it is not my decision. So, you guys decide if you think [DNR is justified], you write, you sign, you decide, I am not going to decide on this... When they came by and saw the patient, they decided to write a DNR [order] ... I did not agree on that to be honest, but I didn't say no.' -P9 ▶ 'I would [manage] some patients [differently than] others based on the severity of their illness so that's definitely... that was a challenge, and there was a feeling of guilt to be quite honest.' -P4 ▶ 'It's very hard for me to deny a patient care when they're quite sick. Yes, they are not dying right now. They can reach another hospital, but it's very hard to say no, I am sorry, go.' -P10
14	Medical-moral distinction	<ul style="list-style-type: none"> ▶ 'In COVID COVID-19, it was pure, pure, pure medicine... without the extras, there wasn't any other cofactor other than medical' -P2 ▶ 'Practitioners did not put the ethical principles at the forefront so they were merely trying to provide the service, the minimal viable service I have to say, without actually adhering to what we used to do in like regular practice.' -P6 ▶ 'That was one of the things [that were compromised]. Basically, consenting people about procedures as well as discussing the results with them in a fully informed fashion.' P3 ▶ 'You don't have time, you intubate and extubate. [Contacting family] is really the least important. The family didn't make any decisions, we updated them.' -P7

Table 5 Reflections, total count: 84

Count	Subthemes	Illustrative quotes from participants
10	On the pandemic	<ul style="list-style-type: none"> ▶ 'We didn't know, we had no idea...the Tsunami came, and it covered us.' - P16 ▶ 'The quarantine was a good lesson for everybody that you can live, you can survive.' - P13 ▶ 'The good thing about this time, it kind of, it was like a stress test to the [healthcare] system and basically I can say that it can unmask some of the deficiency that needs to be corrected.' - P6
20	On the personal	<ul style="list-style-type: none"> ▶ 'I was very cautious not to go to (my father's) house and stuff like that...but he died of COVID. I saw my father struggling with the BiPAP(non-invasive ventilation), struggling with the illness, with the disease. It's one of the stresses or experiences of the medical (profession) ... it hurts to be honest.' -P9 ▶ 'My view of life is different a bit, it's... we run after this life and we try to do everything we can, but everything could be lost...It's not that I don't value life. I think of death as something that it's ok to die you know, it's just going to happen. And I even thought of teaching my kids, like to know that even the close ones, even your mom and your dad could have an accident and you lose them and how would you handle that. What I would want you to do if I die, you know, because I see a lot of death.' -P10
28	On people	<ul style="list-style-type: none"> ▶ 'I think COVID really showed each person's personality, who they are. Those who really care ... you come to realize now who really cares about you, about other people and those who are a little bit careless.' - P15 ▶ 'My view of the people around me changed a lot. I knew people were stupid, I am more than convinced [now] that they are stupid, that's all.' -P3 ▶ 'Every medical staff or healthcare worker, you reanalyze it again and again, there are so many things that we take for granted ... when it comes to nursing or other health allied teams you don't really think much about their circumstances and what they have to go through to actually achieve the perfect medical care that you will take credit for because you're on top of the pyramid [as a physician] basically.' -P1

On people

Participants felt the pandemic experience brought out people's 'true natures'. Some expressed grievances, labelling behaviours as lazy, stupid or careless. Others, however, shared equally powerful accounts of appreciation for others.

DISCUSSION

The COVID-19 pandemic created unprecedented clinical and ethical challenges. This study represents an effort to gain a deeper understanding of the moral experiences of senior physicians. The attempt to identify ethical issues in the Saudi medical setting was uniquely challenging; bioethics remains elusive to most practitioners, with little training, scholarship or practice opportunities.⁹ While most participants described several moral challenges, very few identified these situations as ethical in nature.

Perhaps the biggest identified challenge was the reconciliation of professional and personal commitments. Amidst a national lockdown, and as social distancing, working from home and virtual conferencing acquired newfound prominence in everyday vernacular, participants were spurred into action by a profession-based obligation to provide care despite growing panic.

HCWs have uniquely fundamental moral responsibilities by virtue of their healing professions.³⁹ Physician and bioethicist Edmund Pellegrino famously described the practice of medicine as inherently moral, locating that morality in the vulnerability of patients and the corresponding authority of physicians, a dynamic that was especially relevant during the pandemic.^{40 41} Pellegrino contends that the imbalance of power, under the most humbling of circumstances, compels the physician to act morally.⁴²

Moral responsibility appears in contemporary Saudi bioethical scholarship. Although no works offer a philosophical examination of the practitioner's moral commitments, several quantitative studies note inherent moral obligations including safeguarding 'patients' rights' and healthcare access, and ensuring honesty, transparency and moral decision-making.⁴³⁻⁴⁷ These works attempt to identify practitioners' ethical obligations as they relate to complex moral dilemmas such as disclosure, informed consent and end-of-life care.⁴⁵⁻⁵⁰ In recent years, the identification of specific ethical challenges in the Saudi context has also garnered the attention of researchers. Issues relating to DNR orders, conflicts of interest, patient-provider relationships, justice and reproductive choice are routinely recognised as areas

of ethical concern.⁵¹⁻⁵³ Subsequently, several studies recommend more professional ethics codes, clear practice guidelines and a locally informed and culturally sensitive bioethics discipline.^{52 53}

Attention to moral responsibility is further evident in Saudi ethical scholarship relating to the pandemic. A 2020 study found that although practitioners harboured concerns regarding personal safety and institutional resources, these worries did not deter from their moral obligation to provide care.⁵⁴ This was consistent with other findings on the challenges practitioners face in balancing their commitments to patients with their commitments to their loved ones.^{55 56} Another study described participants' accounts of moral uncertainty as they relate to medical intervention, triage and resource allocation especially in the absence of scientific evidence.⁵⁷ Interestingly, a different study identified ethical challenges pertaining to the country's robust public health response, where some participants expressed difficulty in coping with newfound restrictions but were ultimately supportive of these warranted measures.⁵⁸ Indeed, the authors of this last study add their support in accordance with the principles of bioethics.⁵⁸

These studies indicate that despite the absence of a professional bioethics discipline, Saudi practitioners are increasingly mindful of the moral obligations inherent to their practice. Indeed, it was that moral commitment that was often reported to be at the crux of ethical dilemmas faced by participants.

While some participants prioritised professional obligations, and accepted personal risks willingly, they felt guilty endangering loved ones. Participants in administrative positions experienced additional challenges in ensuring the protection and safety of HCWs while meeting patient needs. Notably, several participants voiced disappointment in colleagues who skirted their moral responsibilities. Despite participants' agreement that self-preservation, personal protection and religious freedom were rightful interests of HCWs, a majority did not find those interests sufficiently justified the refusal to provide care during a public health crisis.

The moral obligation to discharge care during increased risk has been explored repeatedly. Often articulated as the duty to care, it refers to the role-based obligation to provide care even in the presence of risk, burden or inconvenience.⁵⁹ Although this obligation is fundamental, it is not absolute.⁶⁰ Practitioners are not obligated to jeopardise their own physical or emotional well-being, resulting in tension between the duty to self and the

duty to patients that is difficult to navigate. WHO recommendations encourage practitioners to exercise professional and moral judgement and to evaluate personal burdens in view of their instrumental value as practitioners, and their competing commitments to others.⁶¹ Undoubtedly, the moral obligation to provide care during times of heightened threat necessarily warrants an institutional responsibility to minimise risks. In the absence of risk-mitigating measures, the practitioner's obligation to endanger themselves diminishes.⁶⁰ Several participants identified PPE shortages and limited resources as an important factor in various difficult moral decisions.

Participants described additional challenges in ordering DNRs, communicating with relatives and accepting responsibilities beyond their expertise. Notably, very few participants recognised these challenges' ethical dimensions, regarding them as expected and ordinary aspects of their practice—although occurring with an increased urgency and frequency. While navigating moral issues is a necessary requirement of routine healthcare practice, the failure to recognise ethical situations contributes to practitioner distress and prevents access to formal ethics support.

Indeed, participants described an internal sense of duty to resolve these complex situations. They rationalised difficult choices in two ways: by likening the pandemic to a war where otherwise objectionable actions are accepted, or by drawing clear distinctions between the medical and the moral where the former is more valued than the latter.

Scientific scholarship has been rife with military terminology in relation to COVID-19.⁶² Research indicates that the use of metaphors influences how people perceive and think about certain issues thus enhancing morale, affecting behaviour and prioritising resources.^{62 63} Still, some scholars caution against the use of military metaphors in medicine. The writer Susan Sontag warns that in waging a so-called war against the disease, patients risk becoming collateral damage.^{63 64} Sontag argues that metaphors facilitate a shift from fighting the disease to fighting the patient, and result in increased stigmatisation, unnecessary suffering and ultimately a devaluation of human life.⁶⁴ Later scholars have echoed Sontag's concerns arguing metaphors unduly emphasise the biological and physical aspects of a disease, neglect the social, psychological and communal elements of an illness, silence the voices and experiences of patients, and hamper compassionate and comprehensive care.⁶³

It is possible that in viewing the pandemic through a metaphorical military lens predominantly concerned with the clinical aspects of care, some participants inadvertently misconstrued, minimised or entirely missed the ethical dimensions of healthcare dilemmas. Indeed, a few participants distinguished between the medical and the moral, relegating the moral to a secondary, superfluous, position. In doing so, participants created a false division between what they perceived to be essential at the time—technical efficiency and physiological outcomes, and what they believed to be an important, but irrelevant, luxury—the ethical and the social.

The medical/moral distinction has been vehemently contested.⁶⁵ Philosopher Alisdair MacIntyre understands the goals of medicine—or as he terms them, the goods—to be the help and healing of patients.⁶⁶ He describes these goods as internal to the practice; they can only be achieved through active participation.⁶⁶ MacIntyre's goods include both moral and technical components which must occur together and necessarily overlap.⁶⁵ In other words, for a practitioner to achieve the intended goals—goods—of her practice she must actively pay attention to all its components, the medical and the moral, only then would she arrive at the intended outcomes of health

and healing for her patients. It is likely that some participants' inability to recognise the ethical requirements of their practice stems from the dominance of the medical model in Saudi healthcare.⁹ The disproportionate favouring of the technical also precludes the development of alternative models by which practitioners may navigate moral challenges.

Despite reporting significant emotional burden, only two participants mentioned a role for a hospital-based ethics service. Although the pandemic brought new responsibility and much attention to the role of bioethics in healthcare on a global scale, this was not evident in this study. Responding to ethical uncertainty can be daunting, even for those with significant training and experience. Research indicates value to sharing ethical decisions, including the minimisation of burden and distress.⁵⁹ Participants may have similarly benefited from formal ethics involvement. Interestingly, KSUMC's ethics service is equipped to respond to ethical concerns, support practitioners, and inform and develop ethical practice guidelines.

Strength and limitations

This study's strengths lie in its novel contribution to understanding how physicians perceived and responded to moral challenges during COVID-19 at a major Saudi medical centre. By giving voice to these experiences, this study also shares in preserving the human lived experience of responding to COVID-19 as a HCW. It is hoped that this paper will encourage further examination of moral healthcare practice within Saudi Arabia, and inspire more research aimed at understanding how practitioners recognise, consider and respond to ethical dilemmas.

The absence of a flourishing bioethics discipline is a noteworthy limitation of this study. It likely affected participants' knowledge of, and ability to, identify ethical dilemmas, and subsequently this examination. Likewise, the lack of formal ethics education may have contributed to misunderstandings over what was identified as 'ethical'.

Another notable limitation to this study is its population. All participants were senior physicians with decision-making authority; this may have resulted in missing some of the unique moral challenges experienced by junior physicians and other practitioners.^{29 30} Research has shown that nurses often report feeling powerless and having limited influence,⁶⁷ as noted by some participants. It is invaluable to document these experiences. Likewise, this study's restriction to one academic healthcare organisation may limit the generalisability of its findings. Follow-up studies are needed to explore ethical challenges experienced by more diverse groups of healthcare practitioners, and in different healthcare settings.

CONCLUSION

It appears that most participants were guided by an inherent sense of moral obligation that motivated them through the toughest and most uncertain times of the pandemic. Although many reported significant moral challenges, and described substantial difficulty in addressing these dilemmas, very few identified these challenges as ethical in nature, and in turn, none sought ethical guidance. Rather, driven by a sense of duty, many participants took on the burden of resolving these challenges themselves—whenever possible—rationalising these oft fraught decisions by likening their experiences to wartime action or by minimising attention to the moral.

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