Towards collective moral resilience: the potential of communities of practice during the COVID-19 pandemic and beyond

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ABSTRACT
This paper proposes communities of practice (CoP) as a process to build moral resilience in healthcare settings. We introduce the starting point of moral distress that arises from ethical challenges when actions of the healthcare professional are constrained. We examine how situations such as the current COVID-19 pandemic can exponentially increase moral distress in healthcare professionals. Then, we explore how moral resilience can help cope with moral distress. We propose the term collective moral resilience to capture the shared capacity arising from mutual engagement and dialogue in group settings, towards responding to individual moral distress and towards building an ethical practice environment. Finally, we look at CoPs in healthcare and explore how these group experiences can be used to build collective moral resilience.

INTRODUCTION
The concept of moral distress differentiates moral dilemmas (situations in which the person is uncertain of how best to act) from situations in which the person knows how to act but is frustrated by barriers to action (the person knows what to do, but cannot change what is happening). Moral distress was originally conceived as the situation that occurs when the healthcare professional has a moral judgement, but the presence of an institutional or external constraint impedes that judgement from being carried out.

Common external factors include inadequate resources or staffing, insufficient organisational support and specific clinical contexts such as end-of-life care or critical care. Additionally, these constraints can be also internal such as real or perceived powerlessness. Moral distress has been associated with negative consequences such as emotional distress, staff turnover, occupational burn-out and diminished moral sensitivity. Unresolved moral distress can also compromise healthcare professionals’ ability to uphold ethical standards to fully address patient needs, thus compromising patient care.

Professionals who act contrary to their personal and professional values or who cannot carry out moral decisions feel that their integrity is compromised, and therefore, they may have ‘moral residues’, the lasting consequences of moral distress. Moral residues can be understood as the result of moral distress when we have seriously compromised ourselves or allowed ourselves to be compromised. As much moral residue build-ups, moral injury becomes more likely to happen.

The term ‘moral injury’ has been defined as an injury suffered as a result of perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations. More recently, Cartolovni et al’s scoping review of moral injury among healthcare workers, also included the development of a conceptual framework to understand the interplay between moral injury and moral distress. To cope with moral distress different strategies have been suggested. Table 1 provides a conceptual clarification about all these related terms.

In this article, the main goal is to show how communities of practice (CoP) can be crucial in fostering the moral resilience of healthcare professionals to support them to manage unavoidable moral distress. Fostering moral resilience can be of great value, especially in exceptional situations such as the current COVID-19 pandemic. To this end, we start by analysing why moral distress is an issue that must be addressed and mitigated, particularly in the context of situations such as the current pandemic because of the huge emotional impact on healthcare professionals. Second, we define and explain moral resilience as one of the most valuable responses to moral distress and propose the term collective moral resilience as the response to moral distress which emerges from the shared experiences of the community. This community can be a CoP, or also other communities where experiences can be shared. Third, we explain CoPs, highlighting the main characteristics of CoPs in healthcare settings, and showing ways in which CoPs can promote moral resilience in healthcare professionals to cope with moral distress. Finally, we address some of the main challenges that this proposal has for education and innovation in the healthcare field. Ultimately, we believe that experiencing the shared knowledge that emerges within a CoP is important during training, thus early on in the formation of professional identity, and is equally important to continue in practice as healthcare professionals. By promoting collective moral resilience, CoPs may also provide a valuable approach to addressing moral distress beyond the pandemic.

MORAL DISTRESS IN THE MIDST OF A PANDEMIC
When ethical conflicts are recognised by healthcare professionals, but they cannot act according to their moral choices, moral distress arises. Jameton’s original conception of moral distress described situations in which the healthcare professional has a moral judgement, but the right course of action is not taken due to the presence of an institutional or external constraint. Despite
criticism of the concept and some controversy over whether the term of moral distress is suitable or not\textsuperscript{11,12}, we agree with Morley\textsuperscript{12} and Rushton\textsuperscript{13} in the recognition of the usefulness of the term. However, according to Morley,\textsuperscript{12} there is a necessity to broaden the definition to one that comprises three core criteria: the experience of a moral event, the experience of psychological distress, and a causal relation between the two.\textsuperscript{12} Since this broader understanding can allow the exploration of other potentially relevant causes of moral distress, and subsequently facilitate some subcategorisation into, for instance, ‘moral-constraint distress’ or ‘moral-conflict distress’.\textsuperscript{14} Although much of the research into moral distress is among nurses, it is also experienced by a range of healthcare providers, including physicians, advanced care practitioners, social workers and chaplains.\textsuperscript{15,16}

The ethical questions that arise in daily practice in healthcare involve great emotional impact under ordinary conditions, and healthcare professionals recognise that their actions are subject to ethical evaluation in daily practice.\textsuperscript{17} In exceptional situations, the emotional impact of daily practice increases exponentially. Based on the experience of the mental health response to the 9/11 terrorist attacks, DePierro \textit{et al}\textsuperscript{18} suggest that the COVID-19 pandemic is expected to lead to high rates of depression, post-traumatic stress disorder (PTSD), and substance abuse among survivors, victims’ families, healthcare professionals and other essential workers. In the COVID-19 pandemic, several factors have been identified as triggering stress, fear and moral distress in health professionals, increasing the mental load of health workers. During the peak period of the pandemic, the vertiginous increase in the number of cases, overwhelming workload, lack of personal protective equipment (PPE) with an associated fear of infection when treating patients, potentially being a vector of infection for family members, lack of specific medications, uncertainty about best treatment strategies, the huge influx of information and misinformation, feelings of being inadequately supported by institutions, racism and stigma towards healthcare providers and the media coverage have been identified as the main factors related to healthcare professionals’ psychological burden.\textsuperscript{19}

Focusing on moral distress, one important aspect that can trigger moral distress in the pandemic is related to the decision-making process about the allocation of scarce resources, such as ventilators, intensive care beds, dialysis and trained personnel. This decision-making process, unavoidably making quick decisions, generates moral distress.\textsuperscript{18,20} In addition, the ethical problems related to allocation involve the withdrawal of life support treatments, which in this case, can occur despite the fact that the treatments are not objectively futile and the patients do not reject these interventions, but fundamentally due to the lack of availability of resources in some settings.

In addition, the shortage of PPE has been one of the main problems in some areas, with a huge repercussion because caring for patients without adequate PPE implies a high risk to acquire the disease. On 29 May, for instance, the number of healthcare workers who have died, with great variation of death rates between countries, was 670\textsuperscript{18} and doubling between May and June 2020 (CBC News, 2020). One Italian physician leader has called this time, ‘a season of death’, with the death count of Italian doctors reaching 170 in July 2020.\textsuperscript{21} In the USA, on 9 July, for the 95 860 cases of COVID-19 among healthcare personnel, the number of deaths among them was 515, following the data provided by the CDC.

Healthcare professionals sometimes have to face the difficult situation of working in unsafe working conditions and trying to provide high quality patient care.\textsuperscript{22} However, when does work-based risk become unacceptable? There is a duty to treat patients regardless of their illness, but there are limits to this duty if there is too much risk.\textsuperscript{23} These extreme situations push healthcare professionals to high emotional impact decision making, given that professionals cannot refuse to care for patients, but neither can they put their own lives at risk.

The other important aspect that can trigger moral distress is the fact that personnel cannot provide the best standard of care because of the huge number of patients that they have to treat. Additionally, hospitals and social health centres imposed restrictive visitor policies to minimise the spread of SARS COV2; families were often unable to visit their loved ones, and clinicians

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\textbf{Term} & \textbf{Definition} & \textbf{Source/ Observations} \\
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Moral distress & The psychological distress of being in a situation in which one is constrained from acting on what one knows to be right due to the presence of institutional or external constraint. & 2 \\
Moral injury & Perpetrating, failing to prevent or bearing witness to acts that transgress deeply held moral beliefs and expectations. A new concept in healthcare, consisting of a deep emotional wound and unique to those who bear witness to intense human suffering and cruelty & 8 9 \\
Moral residue & The result of moral distress when we have seriously compromised ourselves or allowed ourselves to be compromised, threatening or betraying deeply held and cherished beliefs and values. & 6 \\
Moral resilience & The capacity of an individual to preserve or restore integrity in response to moral adversity, including situations that include moral complexity, confusion, distress or setbacks. & 13 \\
Collective moral resilience & Shared capacity arising within a group with mutual trust and connectedness, through the process of sharing ethically challenging situations, thinking together about the challenges, and dialogue to sustain or restore moral integrity in response to moral suffering. & This article \\
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experienced moral distress from treating patients who died alone, and from having to enforce these policies. Moreover, healthcare professionals have had to provide telephone information exclusively, including communicating bad news, which can be a tremendously demoralising experience with a great emotional impact.24 25

The possible negative effects of this set of difficult experiences and decisions that healthcare professionals have to face should not be underestimated. Many medical and nursing organisations are already taking steps to address the moral distress, psychological distress, and PTSD experienced by their workers, and many others need to integrate such support into their responses to the pandemic.26 As it has been pointed out, regarding the ethical challenges arising in the COVID-19 pandemic, ‘preparatory and follow-up practices implemented at different levels may help mitigate distress and empower healthcare providers’.27 One way to cope with moral distress is by fostering moral resilience.

MORAL RESILIENCE IN RESPONSE TO MORAL DISTRESS

Several ways of responding to moral distress have been observed. Moral resilience has been proposed as a positive response to distress, shifting the focus away from negativity and despair, and towards possible solutions and growth. One definition of moral resilience is ‘the capacity of an individual to preserve or restore integrity in response to moral adversity’ which includes situations that include moral complexity, confusion, distress or setbacks.13

In a literature review,28 several definitions of the term moral resilience, as well as different uses of this concept in the scientific literature were analysed. The authors concluded that there is a lack of scholarship on moral resilience, and there is no unifying definition. A qualitative study of interprofessional healthcare providers’ definitions of moral resilience found an emphasis on personal integrity, relational integrity and buoyancy.29 Relational integrity being the ability to understand and respect the values of others while upholding one’s personal integrity. Buoyancy would be the individual’s ability to ‘withstand threats to integrity by leveraging their capabilities to regain or preserve one’s integrity’. Additional capacities to support moral resilience were self-regulation, self-stewardship and moral efficacy. Self-regulation refers to awareness of one’s psychological and somatic states; self-stewardship includes paying attention to one’s well-being while being aware of one’s limits; and moral efficacy requires advocating for what one believes is correct, even when there is resistance. It is evident that with the exception of relational integrity, these themes predominantly focus on individual factors.

To our knowledge, the literature on moral resilience has mainly focused on individual aspects, without paying special attention towards a collective meaning, which we propose is an important contribution of CoP. CoP may allow development of a sense of connection globally as everyone is suffering in some way, due to lockdowns, limited physical interactions, fear of contagion or working at the front lines.37

Although Rushton12 uses the term of collective resilience, she refers to individual and collective resilience, and she does not develop a definition or address this term separately from the general concept of moral resilience. For instance, Rushton states that “one of the crucial elements of moral resilience is the capacity for moral repair, both individually and collectively” (p. 70). It seems that there are no specific differences between moral resilience at the individual level or at the collective one. However, we believe that it is important to specifically address the concept of collective moral resilience.

Turning towards collective moral resilience

Collective resilience[iv] is a new concept which arose in the context of emergencies and disasters to offer a new perspective to think about aspects of personal resilience and recovery in these situations.35 36 “Collective resilience refers to the way a shared identification allows groups of survivors to express and expect solidarity and cohesion, and thereby to coordinate and draw on collective sources of support, to deal with adversity.”35 While mass emergency behaviour and collective resilience refer to the influence of existing social bonds, a critical source of collective resilience in emergencies and disasters is the trend to come together, psychologically and behaviourally. During the COVID-19 pandemic, some have described a deep sense of connection globally as everyone is suffering in some way, due to lockdowns, limited physical interactions, fear of contagion or working at the front lines.37
We propose the term ‘collective moral resilience’ as a shared capacity arising within a group with mutual trust and connectedness, through the process of sharing ethically challenging situations, thinking together about the challenges, and dialogue to sustain or restore moral integrity in response to moral suffering. Collective moral resilience as a term acknowledges the emergent properties of groups in addressing and overcoming moral challenges. This definition is our first approach, and further research is required to explore and understand what are the necessary conditions for collective moral resilience to occur. However, we claim that in order to foster collective moral resilience, CoPs can be of great value.

What is the role of CoPs in the healthcare field?

CoP was initially defined as a group of people who share a common interest and a desire to learn and contribute to the community with a variety of experiences. The starting point was the idea that situated learning emphasises the social interactions that support learning within a community of those who practice similar professions or are involved in similar fields. Subsequently, Wenger et al. pointed out that ‘CoPs are groups of people who share a concern, a set of problems or a passion for a topic, and who deepen their knowledge and experience in this area by interacting on a regular basis’. These people, they add, do not necessarily work together, but as they spend time together, they often share information, ideas, and advice so they help each other solve problems of common interest to the group.

At some point, a CoP can be better understood as a process rather than as a specific product or entity. People who make up a CoP share tacit knowledge and meet regularly to guide each other through their understanding of a mutually recognised real-life problem. Some of the common characteristics in the CoPs are: interaction, collaboration to share and create knowledge, and the promotion of a shared identity among its members, which can be aligned with the concept of relational integrity. Therefore, one of the key elements is mutual engagement.

Ranmuthugala et al. carried out a systematic review to analyse how CoPs are established in the healthcare field. From a historical point of view, the authors state that, although in the first publications the focus of the CoPs was on learning and exchange of information and knowledge, more recently, the CoPs were used in the literature as a tool to improve clinical practice and catalyst of evidence-based practice. As a result of the review, they proposed a series of characteristics of CoPs in healthcare: (1) arise from shared practice, (2) help to establish professional identity, (3) have a common goal or purpose, (4) have no geographical, professional and/or organisational limits, (5) both the group and the focus may vary from time to time, (6) the exchange of knowledge is done through formal and informal processes, (7) social interaction, both face to face and virtually, is of great importance, (8) the origin can be spontaneous or established, (9) they have five stages of development: potential, fusion, maturation, administration and transformation, (10) shared commitment and enthusiasm, (11) self-selected membership may be more successful than a CoP with externally appointed members, (12) regular communication and interaction between members is essential and (13) need infrastructure to support them.

However, it seems that none of these elements are really specific to CoPs in the healthcare field, but rather common elements of CoPs applicable to any field.

The authors also note variation with respect to structure and method of interaction within a CoPs. Face-to-face meetings were the most frequent means of interaction, with email and web-based methods the next most frequent. Although specifics on communication methods have not been studied, one case study did find that face-to-face meetings were helpful to promote energy levels of group members. Other efforts have reported success with primarily virtual methods.

What is, then, the role of CoPs in the healthcare field? What is specific about them? In the table below, we provide a fine-grained comparison of the main characteristics between CoPs in healthcare and CoPs in other industries. We understand that ‘the CoPs constitute an intentional and determined space to promote the exchange of experiences that arise in clinical practice’. The intentional development of CoPs by health professionals can arise after having identified a shared clinical problem relevant to their daily working life, or sometimes it is urgent clinical problems, with the patient at the centre of medical care, which generates the start of the CoPs. Though, this exchange of experiences that arise in clinical practice are not limited solely to these two aspects. It is necessary to include the ethical dimension and obligation that runs through all clinical practice, and which refers not only to providing patient-centred care or to solving the clinical problem, but also to the interaction between healthcare professionals and the relationship with the institution, among other elements. However, there is a lack of research on how a CoP can be a source of ethical learning, particularly in the healthcare field. Our hypothesis is that CoPs generate practical wisdom on ethical issues. The practical wisdom refers to reasoning and deliberation forms in which knowledge, reflection, attitude and professional experiences are combined to make a judgment. As Aristotle conceived it in The Nicomachean Ethics, practical wisdom (phronesis) must be acquired through practice: the deliberative, emotional and social skills that enable human beings to put their general understanding of well-being into practice in the most suitable way to each occasion can not be acquired by learning general rules. As Edmondson and Pearce argue, healthcare professionals’ reasoning involves practical wisdom, and not only evidenced-based or value-based reasoning. Practical wisdom is a key element in dealing with vital human affairs/problems with a lack of prescribed solutions, and for which uncertainty and fluidity must be tolerated in seeking to resolve them. This form of deliberation involves ethical concerns, and refers to emotional, social and ethical capacities. This framework could be used to develop approaches to healthcare based on experiential learning.

Austin points out that there is a pressing need for dialogue among healthcare professionals, and proposes understanding healthcare settings as moral communities, as a way of learning about ethical coexistence. She argues that healthcare teams can be an exceptional source of support for their individual members, as well as for the team itself. The behaviour of healthcare professionals is determined by the codes, values and responsibilities of their profession, which define their attitude towards ethical practice. Nevertheless, as Austin points out, being ethical is based on relationships and implies a capacity to respond towards others: an interdisciplinary understanding of the moral space of the healthcare environment could open new ways of thinking, investigating and searching for methods to address those challenges. Relational integrity, that is having moral solidarity and community values, has been considered an attribute of moral resilience. While relational integrity is a characteristic of moral distress that ‘reflects the dynamic interplay between upholding personal integrity and one’s professional value commitments that prioritise the interests of the people they serve’, collective moral resilience implies that the team (the community of practice) is the source from which it is possible to foster resilience.
CoPs pursuing phronesis must be guided by experts, who can manage the ethical and emotional aspects quite complex. For a CoP, it is recommended to have skilled navigation. Since the fostering collective moral resilience within CoPs is a cyclical process, experts should be present to address ethical issues and foster emotional resilience. These experts should also be skilled at creating an environment wherein safe and authentic dialogue cultivate an attitude of openness and curiosity among members. They can be different healthcare professionals, such as psychiatrists, psychologists, social workers, nurses and bioethicists, among others. In this way, opportunities can also be generated for learning about specific ethical issues that arise, guided by experts.

A CoP is organised around a ‘practice’. Traditionally, three characteristics or qualities define a ‘practice’, and we propose a fourth characteristic of a practice:

1. Joint enterprise. The members of a CoP are there to accomplish something on an ongoing basis; they have some kind of work in common and they see clearly the larger purpose of that work. They have a ‘mission’. In the simplest of terms, they are ‘up to something’.
2. Mutual engagement. The members of a CoP interact with one another not just in the course of doing their work but to clarify that work, to define how it is done and even to change how it is done. Through this mutual engagement, members also establish their identities at work.
3. Shared repertoire. The members of a CoP have not just work in common but also methods, tools, techniques and even language, stories and behaviour patterns. There is a cultural context for the work.
4. Practical wisdom (proposed). The members of a CoP share a practical wisdom which combines different professional experiences, as well as the reflection about them. The practical wisdom is not included in the professional training, neither in the student’s curricula. Only emerges with the experience in the profession.

CoPs, communities of practice, affecting all the participants, not only on an individual level, but as a collective group. How healthcare professionals relate to each other and exchange ideas has been explored using the concept of dialogue.

Kumagai et al. have explored the concept of dialogue, as opposed to discussion, as a process for healthcare professionals to relate to others. They define discussion as typically goal-oriented, focused on objective data, and often rooted in pre-existing power structures. Conversely, dialogue is more exploratory and conversational, de-emphasising hierarchy and supporting reflection on one’s own values, life experiences, emotions and worldview. It can enhance professional identity formation, that is, being human in one’s role as a healthcare provider. Dialogue is considered deeply relational, and requires understanding of hierarchies of power, privilege and inequities in one’s environment and in healthcare, addresses illness experience, suffering, injustice and ethical issues. To fully engage requires respect, patience and openness to difference, in life experience and perspective. Translation of dialogic communication style to the physician–patient and teacher–student relationship contributes to exploratory exchanges for understanding, allowing silenced voices to be heard and thus, broadening understanding of human experience of illness and treatment.

The way in which CoPs increase resilience can be understood on a cyclical structure. Following this structure, based on practice in the healthcare field, several ethical questions emerge involving a big emotional burden. Due to this, a CoP is intentionally created, as a space to share experiences, collectively reflect on the cases arising from practice, raise new questions regarding how to face similar situations in the future, expose and talk about vulnerability as a shared experience and guiding an ethical exploration. Ultimately, the knowledge generated through this interaction at the CoP, which in this case we could consider as practical wisdom, can increase the resilience in a collective manner. We say that it is cyclical because again from practice new ethical problems will arise and so on.

We theorise that a CoP can provide a space for mutual trust in which professionals can openly express their experiences, as well as provide various perspectives. Otherwise, participation could be counterproductive and increase the participants’ emotional burden. Therefore, discussion and dialogue should be facilitated by experts with sufficient experience to facilitate groups, address emotional needs, understand ethical issues and foster moral resilience. These experts should also be skilled at creating an environment wherein safe and authentic dialogue cultivate an attitude of openness and curiosity among members. They can be different healthcare professionals, such as psychiatrists, psychologists, social workers, nurses and bioethicists, among others. In this way, opportunities can also be generated for learning about specific ethical issues that arise, guided by experts.

### COP AS A PROCESS TO FOSTER COLLECTIVE MORAL RESILIENCE FOR HEALTHCARE PROFESSIONALS: THE PARTICULAR CONTEXT OF THE COVID-19 PANDEMIC

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### Table 2 Comparison of key elements between CoPs in healthcare and CoPs in other industries

| Element          | CoP                          | Healthcare CoP                     |
|------------------|------------------------------|-----------------------------------|
| Intended purpose | Sharing knowledge            | Sharing knowledge                 |
|                  | Improving organisational performance | Improving clinical practice        |
|                  | Fostering innovation         | Enhancing humanism of and healthcare quality |
| Outcomes         | Performance and profits      | Development of local guidelines and policies |
|                  | Find competitive advantage   | Improved adherence to evidence-based policies |
| Domain           |                             | Quality improvement to better standards of care |
| Shared learning need | Business, Education, Government | Healthcare professionals committed to providing humanistic and quality care and improving well-being for patients and practitioners |
| Practice         | Joint enterprise—improving performance | Joint enterprise—improving patient care, cultivating self-awareness and resilience |
| Resources provided by interactions over time | Mutual engagement—understanding for other professions or industries | Mutual engagement—opportunity to address healthcare system and culture |
|                  | Shared repertoire—industry dependent, but often includes technological solutions | Shared repertoire—often limited resources, excessive demands, patient-centred care. |
|                  | Practical wisdom (proposed)—improving the ability to see which course of action is best supported by reasons | Practical wisdom (proposed)—activating capacities of the self (professional), other (patient and/or carers and colleagues) and the problem in itself |

CoPs, communities of practice.
CoPs have the potential to build collective moral resilience by allowing a space to share ethical challenges. This sharing of experience allows for a shift in the relationship with a situation causing distress, through reframing of the mindset that the distressing experience is entirely negative. By choosing inquiry over frustration, the presence of trusted others allows for questions that explore possibilities and disrupt negative patterns of thinking. This allows for sharing of strategies to navigate ethically complex situations and for recovery from the challenge, enabling clinicians to adapt to ethically complex situations in the future. Building CoPs emphasises the importance of the role that culture and systems play in supporting clinicians’ moral resilience, and can be a step towards building an ethical practice environment.

We hypothesise that CoPs provide a process to explore moral distress through social support and connectedness, and that this connectedness has the potential to generate practical wisdom. Allowing for this dialogue through CoPs also targets culture change in healthcare settings, increasing the understanding that resilience is a shared responsibility between the individual clinician and the setting in which they work. Improving collective moral resilience through CoPs may promote culture change towards a safe and ethical practice environment (figure 1).

In the context of the COVID-19 pandemic, a study of healthcare workers providing direct care for patients with COVID-19 showed that those reporting a strong social support network had a lower degree of stress and anxiety, and higher level of self-efficacy. Social support is also linked to resilience. It includes informational, instrumental and emotional elements and reduces threat-related distress. CoPs offer an opportunity for social support from peers who understand specific work-related factors. One example is Schwartz Rounds (https://www.schwartzcenter.org/programs/schwartz-rounds), which offers a multidisciplinary space for staff to reflect on their work together. A recent review found that participating in these spaces was associated with increased compassion and empathy from connectedness with peers. A randomised controlled trial of physician’s discussion groups showed reduced distress including depersonalisation, compared with physicians given protected personal time.

Greenberg et al point out a series of potential mechanisms that can help to mitigate the negative moral effects of the current COVID-19 pandemic on healthcare professionals. Although the authors do not refer to the creation of CoP to help manage distress and moral damage associated with COVID-19, we consider CoP to be the optimal setting in which to develop these strategies:

1. Regarding early action, all healthcare professionals must be prepared for the moral dilemmas that they will face during the COVID-19 pandemic, since this can reduce the risk of mental health problems.
2. As the situation progresses, the team needs support to understand the morally complex decisions that take place.
3. Once the crisis is over, it is necessary to reflect and learn from extraordinarily difficult experiences to create a meaningful narrative.

The value that virtual CoP (CoPv) can have in a pandemic situation such as that of COVID-19 is undeniable. McLoughlin et al pointed out that CoPv reduce hierarchical barriers and allow sharing information and learning from each other, although the development of trust within CoPv requires some face-to-face meetings to guarantee the development of relationships. The exceptional situation created by COVID-19, especially the global nature and rapid spread, has led professionals to create a virtual global scale kind of CoPv for learning about the shared problem of how to treat these patients. Healthcare professionals have had to process a large amount of information, which on numerous occasions has been distributed through social networks or virtual communities (which we could consider CoPv, given the way they have been articulated): a huge amount of scientific bibliography, action protocols of national and international centres, videotutorials and expert opinions.

In order to foster collective moral resilience in healthcare, it is necessary to provide some guidance on ideal characteristics when establishing a CoP to achieve this goal. Our examination of existing CoP shows that face to face discussions are most...
effective when discussing complex emotional and ethical issues. That is, compared with virtual discussion fora, the immediacy of thinking together via in person conversations about shared problems goes beyond information or resource sharing, to inclusion of tacit knowledge and subsequently, knowledge development. Of course, in situations when physical distancing is mandated or recommended, virtual technology with video provides an alternate option that ensures safety and promotes accessibility. With respect to participants, CoP can be effective but may achieve different goals whether organised for a single profession vs multidisciplinary. There is value to both approaches, however, we support attempts to engage multidisciplinary professionals to address perceptions in providing care and foster camaraderie among the entire healthcare team. We can expect variation in levels of participation and amount of disclosure if participation in the CoP is voluntary or mandated by the organisation. There may also be opportunities for education and learning about specific ethical topics that arise, guided by experts. To allow for open discussion and participation, we have found through our experience that there are advantages and disadvantages based on the number of people able to participate in a discussion. In general, we encourage participants to attend routinely and consistently to foster trust and cohesion.

**Challenges for education and innovation**

It has been noted that bringing healthcare providers together and labelling them as a CoP does not necessarily mean it will function as one. As mentioned, traditional CoPs in healthcare were intended for the learning and sharing of knowledge, and promoting evidence-based practice. Creating CoPs in healthcare that address ethical issues requires willingness of healthcare providers to share their dilemmas and distress, and think together about expertise from peers or facilitators to create a safe and supportive environment that focuses on growth and resilience from those ethical experiences.

The existing hierarchal culture of healthcare with its stigma about errors and failure remain a barrier to sharing dilemmas. There may be a lack of willingness for healthcare providers to share experiences for fear of judgement and appearing incompetent. The human dimension of medical error from the clinicians’ perspective often includes guilt, fear and isolation. Furthermore, the hierarchy within healthcare culture may further limit honesty and vulnerability. Challenges to communication in medical settings have been attributed to vertical hierarchy differences, where one provider may be concerned about being incompetent or does not want to offend the other. Professionals on the lower end of the hierarchy tend to be uncomfortable speaking up, whereas those on the higher end of the hierarchy may be uncomfortable expressing vulnerability and carry the responsibility of the decision on their own. Finding commonalities by focusing on common goals of learning, growth and the desire to better meet patient care needs may be one strategy to promote meaningful dialogue about challenging ethical issues with providers from different disciplines. These challenges can also exist within members of the same profession, thus our vision of CoPs as a process that builds trust between community members over time.

**Education**

Trainees may be particularly susceptible to moral distress and moral residue following challenging patient care experiences, given that they are often tasked with ‘implementing plans of care over which they have little authority’. Given that moral residue is cumulative and can result in a ‘crescendo’ effect, establishing a culture of acknowledging and responding to this moral distress early would be expected to prevent the development of moral residue. Currently, there is a wide variation in the methods institutions use to address the moral distress that arises for trainees. Some organisations have a structure in place for a formal debriefing, in which a trained facilitator helps a team cope with the emotions of a challenging case. Many medical schools and residency programmes have developed wellness initiatives, though these are generally focused on mitigating burn-out rather than moral distress, and often take the form of personal exercises such as meditation and journaling. Informally, trainees often cope with the challenges that arise by talking with trusted peers or mentors; the importance of these relationships is emphasised by studies that have found that loneliness is positively correlated with work-related burn-out. To our knowledge, there are few institutions that have established CoPs for the purpose of ethical reflection for trainees.

Although faculty development for dialogical teaching in healthcare education is effective, implementation may be limited by time and space structural barriers. Dialogical moments may be introduced in the moment of acknowledging suffering or distress, and introducing reflective questions or outlining moral dilemmas to stimulate curiosity and further exchange. A formal system in which CoPs are established for trainees and led by trained facilitators would create a space in which to build collective moral resilience. This could be an important and formative group for young clinicians, who face morally and emotionally challenging situations they may never have previously encountered, often with a degree of responsibility they are not accustomed to.

**Role of the organisation and degree of involvement**

Moral distress must be recognised and addressed not only among healthcare professionals, but also within systems and organisations. Otherwise, it is difficult for moral resilience to flourish in environments that do not emphasise a culture of ethical practice. There is a dearth of literature on organisational approaches to mitigate moral distress. While organisational strategies to address moral distress have been mainly focused on individual ways to face it, less attention has been directed towards the organisational strategies to solve and manage these problems as collective issues. These strategies can be seen as pushing professionals to perform an extra effort on addressing these problems, while the responsibility of institutions to create an appropriate environment and culture which make possible the flourishing of resilience has not been sufficiently emphasised. To counteract the increasing problems affecting well-being of healthcare professionals, institutions have to implement structural and organisational strategies, with focus on collective actions.

To support healthcare practice, CoPs have been used. However, with regard to how CoP can contribute to support change at different organisations and levels of the system remains unknown. More research is required to discover how CoPs interact with formal structures within and between health.
organisations, and how organisations take advantage of these CoPs to build their internal knowledge assets. While the CoP functioned as a motor bringing together best practices, research, experiences and a thoughtful learning cycle, their efforts to stimulate changes in practice across the system found resistance due to cultural and organisational norms. However, as Kothari et al remarked, there is still a lack of literature on how to use CoPs to influence change in health systems. Exploring approaches to integration and interaction of CoPs within formal organisational structures is also needed.

Further efforts to implement and evaluate initiatives regarding the effectiveness of CoPs to build individual and collective moral resilience is warranted. As in previous efforts, we can anticipate variation with respect to composition and communication norms for CoPs. The ability of CoPs to address ethical issues, as well as an exploration of processes used to address these issues and build resilience can be evaluated further. Studying moral distress with validated tools such as the Moral Distress Scale, the ethical climate with tools such as the Ethical Decision Making Climate Questionnaire, and more recent the validated Rushton Moral Resilience Scale can help to define an association between moral distress and moral resilience. Exploring qualitative data from participants may help define specific characteristics of a CoP that influence individual resilience and promote organisational culture change through collective moral resilience.

CONCLUSIONS

The negative effects that arise from difficult experiences that health professionals face as part of their everyday practice must be recognised to better prevent them. Many medical and nursing organisations are already taking steps to address the moral distress, psychological distress, and PTSD experienced by physicians and nurses, and many others need to integrate such support. Incorporating CoPs as a learning and sharing process to help strengthen team bonds, to overcome difficulties experienced as part of work, to develop coping strategies, and to foster not only personal, but also team resilience. Through CoP we aim to specifically recognise the system and organisation’s responsibility towards shaping the working environment in a way that promotes an ethical culture of care for both the patient and the clinician. CoP may be an effective strategy to increase collective moral resilience of healthcare professionals. We encourage/recommend:

1. Healthcare organisations and leadership should acknowledge and address the moral distress and ethical dilemmas encountered by healthcare professionals on a routine basis, and especially during situations of extreme stress such as the pandemic.
2. Healthcare organisations may consider establishing CoPs as a process to build collective moral resilience and ethical practice environments, focusing on system and culture issues that contribute to moral distress and occupational burn-out.
3. The creation of CoP networks (national and international) that address moral distress and ethical challenges in healthcare may be of great value, so that facilitators and organisers can exchange experiences, challenges and strengths.
4. Educational leaders involved with teaching students of healthcare professions may consider introducing CoPs that foster dialogue and address ethical challenges in the early stages of training.
5. Further efforts to establish CoPs may also explore their ability to improve individual and collective moral resilience, as well as determine how CoPs can integrate within the organisation to support health system change.

Contributors JD, SS, JdG and BM contributed to design the main ideas on this research through discussions and meetings, identifying the main aspects of the study. JD wrote the first draft of the manuscript. JD, SS and JdG reviewed and interpreted the relevant literature. All the coauthors critically reviewed the article, and contributed in the writing and editing process, as well as the review. All the authors have approved the final manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

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