Crisis Standards of Care in a Pandemic: Navigating the Ethical, Clinical, Psychological, and Policy-making Maelstrom

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Running Title: Crisis Standards of Care in a Pandemic

Abstract:

The COVID-19 pandemic has caused clinicians at the frontlines to confront difficult decisions regarding resource allocation, treatment options, and ultimately the life-saving measures that must be taken at the point of care. This article addresses the importance of enacting Crisis Standards of Care (CSC) as a policy mechanism to facilitate the shift to population-based medicine. In times of emergencies and crises such as this pandemic, the enactment of CSC enables concrete decisions to be made by governments relating to supply chains, resource allocation, and provision of care to maximize societal benefit. This shift from an individual to a population-based societal focus has profound consequences on how clinical decisions are made at the point of care. Failing to enact CSC may have psychological impacts for healthcare providers particularly related to moral distress, through an inability to fully enact individual beliefs (individually-focused clinical decisions) which form their moral compass.

Keywords: Coronavirus; Crisis Standards of Care; COVID-19; Pandemics; Global Public Health; Population-based management; Moral Alignment, Ethics

Background

On January 30, 2020, the World Health Organization (WHO) declared the SARS-CoV-2 outbreak a Public Health Emergency of International Concern.[1] Forty-one days later, the WHO issued a statement that the coronavirus, now known as COVID-19, could be characterized as a Pandemic. The WHO pandemic announcement triggered immediate and sweeping emergency protocols and contingency plans across the globe. In the healthcare sector, a key emergency policy initiative would have involved a triggering of Crisis Standards of Care (CSC), which are defined as a substantial change in usual healthcare operations and the level of care it is possible to deliver, which is made necessary by a pervasive (e.g., pandemic influenza) or catastrophic (e.g., earthquake, hurricane) disaster.[2] However, a clear announcement or trigger for the shift to CSC has not been articulated publicly to date. As of July, 2020, the pandemic still shows no signs of abatement. Globally there are 10,897,074 cases with over 521,874 fatalities. The United States currently has the most cases with over 2.7 million and more than 100,000 fatalities.[3]

United States CSC Implementation

While numerous reports have outlined guidelines pertinent to CSC and when to trigger, in the United States actual declaration and implementation are left to state jurisdiction, which has resulted in fifty different policies and variable triggers.[4-7] For example, the Minnesota CSC Framework does not explicitly state that a pandemic event should trigger a CSC, rather that the "Minnesota Department of Health might consider the following indicators and triggers to activate a CSC response for a Pandemic phase/ impact."[8]

This contradicts the guidance provided in 2009 by the Institute of Medicine (IOM) where the authors unanimously agreed that waiting for a hard "trigger" as evidence of a crisis was deemed inappropriate.[5] Absent in government policies and the disaster literature is an explicit trigger that mandates a shift to a systems framework for the enactment and implementation of CSC plans that outline the legal, ethical,

palliative care, and mental health issues that agencies and organizations at each level of a disaster response must address. The change in the delivery to CSC is formally declared by a state government, which provides the legal and regulatory framework to authorize care to be provided in non-traditional locations and to provide guidance for triage of life-sustaining interventions.[5-6]

International CSC Implementation

For the global community, the WHO has not released guidance on CSC.[9] The American Medical Association has provided guidance related to the Code of Ethics related to CSC but does not articulate clinical protocols.[10] Guidance is focused primarily on decision-making related to the allocation of scarce resources. To our knowledge, no studies have focused on the international implementation of CSC. The development of CSC guidelines should ideally be led by the WHO, however each country should enact its own distinct mechanisms to clearly identify triggers for when CSC should be implemented. Early and decisive action in this regard will contribute to reducing moral distress for frontline healthcare workers and contribute to a coordinated and more effective response to the current and future pandemics.

CSC and Population-based Medicine

In absence of CSC declaration, clinicians have been forced into ongoing ethically- and morally-ambiguous scenarios at the point of care, that should instead have been addressed at the policy level. The root of the dilemma inherent in these scenarios is not merely a failure to enact a national CSC. Rather, the enactment of CSC is meant to signal to frontline providers a fundamental shift "from optimizing individual care to maximizing population health outcomes".[11] With this shift should come an understanding that the goals of care during a pandemic are fundamentally different, and that point of care decisions must be made in light of limited resources and efforts to limit further spread of the disease.[12] Under CSC, medical care during a pandemic event, such as COVID-19, would shift from an individual focus to the promotion of thoughtful stewardship of limited resources intended to result in the best possible outcome for society as a whole.[5] This defines population-based medicine or management which most individual healthcare providers have neither trained in, nor have experience in implementing. For most, education, training, and their daily work have been focused on individual one-on-one patient care and decision-making strategies. The shift, therefore, to population-based medicine is one that requires active and ongoing guidance from governments to frame in explicit terms the approach to clinical care that is expected in this crisis.

Levin et al. (2009) discussed the need for altered standards of care during an influenza pandemic as early as 2009.[13] Subsequent IOM reports followed in 2009 and 2012 that provided frameworks, guidelines, and a toolkit for CSC.[4-6] Leider et al. (2017) argue that ethical guidance provided in many of the frameworks for CSC should be both theoretically sound and practically useful.[14] One of the challenges associated with the implementation of CSC is that these have not seen wide-scale implementation globally, other than some aspects related to triage management of large populations which has become a crucial challenge for Italy where the category of non-survivability based on lack of life-saving resources had to be implemented.[15,16]

Moral Distress and Other CSC consequences on the Frontlines

The enactment of CSC allows healthcare providers, organizations, and systems alike to set off a domino effect of actionable policies. These policies dictate concrete decisions relating to supply chains, resource allocation, and provision of care to maximize societal benefit.[5] This shift from an individual to a population-based societal focus has profound consequences on how clinical decisions are made at the point of care. The practical implications of enacting CSC have been elaborated. However, there are also important psychological impacts for healthcare providers. The provision of care in a population-based medicine approach may have direct or indirect consequences from a patient safety lens. In particular, clinicians who provide what they perceive as sub-par or even inappropriate care may suffer from the well-known second victim phenomenon that occurs within professional caregivers following an adverse event.[17,18] Clinicians may "move on" from the events of COVID-19, in one of three possible manners: merely "surviving"; "thriving" and making the best of the lessons learned; or "dropping out", whether of their role, organization, or profession.[19] The second victim phenomenon has been linked to patient safety culture, where non-punitive responses to error have been associated with reduced distress caused by the second victim phenomenon.[20] The risk of a negative safety culture impacting clinicians' well-being and increasing the likelihood of experiencing second victim phenomenon is substantial: open communication and blame-free environments are a critical underpinning of patient safety culture.[21] However, in the midst of a pandemic, dynamics of blame, shame, and deferral to hierarchy are likely to be rampant. For instance, how should clinicians be blamed or penalized for adverse events that occur as a result of limited resources? Similarly, clinicians must be able to openly acknowledge their concerns, fears, and traumas. A culture that shames honesty and does not allow for sharing of emotional trauma is one that will result in long-term harm to providers everywhere.[20]

In particular, the experience of moral distress is one that is likely to be directly exacerbated by the enactment, or lack thereof, of CSC. Moral distress describes psychological issues that arise from knowing what the 'right thing' to do is, but being constrained from doing the 'right thing' by external factors. Frontline providers can experience moral distress through an inability to fully enact individual beliefs (clinical decisions) which form their moral compass. [22]

Mental health consequences of working in crisis conditions that have health system impacts, such as burnout, absenteeism, and sick leave related to moral distress, have been well documented in the literature, including studies on SARS and Ebola.[23,24] In the COVID-19 pandemic, stressful environments, changing expectations, and ambiguous policies create conditions where moral distress is inevitable.[25] Clinicians are asked to dramatically shift to crisis-level practice, however, there is limited support and guidance on how to navigate that transition. The early enactment of overarching broad CSC guidelines that could be modified to suit regional needs would allow for moral alignment of beliefs and actions nationwide, allowing professional caregivers time to mitigate the impact of moral distress.

We recognize that any degree of CSC will still carry some element of psychological burden and cognitive dissonance for healthcare providers, who are asked to operate in an environment where evidence is limited, and decisions may have to be made in direct contrast to what evidence is available. [26] Early national declaration and enactment of CSC will not fundamentally stop this from occurring, however, it

could allow providers the opportunity to reframe and make sense of their upcoming actions, preparing them to make rapid decisions while reducing the psychological burden of ongoing moral distress.

Buffering Moral Distress through CSC

"Sensemaking" refers to the process of cognitively "constructing" a plausible meaning for surprising events or even ambiguous situations that occur. [27] In a very real sense, frontline providers across the globe are engaging in sensemaking around the severity of COVID-19, but are forced to do so while in the heat of the crisis. Evidence from the H1N1 pandemic suggests the critical role that sensemaking plays in aligning perspectives and recognizing the presence and impact of a pandemic in a highly uncertain environment. [28]

In absence of early, nationally enacted CSC we are asking providers to work within their existing frameworks, developed through best clinical judgment yet differing region to region, and quickly apply them in a highly volatile, uncertain, and high-risk situation. This is likely to cause providers moral distress, particularly those who travel to different regions due to healthcare worker shortages, as it is such a rapid and dramatic deviation from their typical practice. However, enacting early national CSC can give providers a universal standard to engage in revised sensemaking around their clinical actions. [26,29] This would create a clear external trigger, allowing providers to better understand the shift from "best standards of care for an individual" to "best standards of care for a population", prior to having to implement them in their personal practice. Failure to give providers this opportunity to update their sensemaking of CSC is only adding an unnecessary psychological burden.

While sensemaking is fundamentally retroactive, it is also ongoing and a major contributor to the psychological well-being of healthcare providers. As the COVID-19 pandemic unfolds, providers will continue to construct their response to COVID-19. The sooner a national CSC declaration is enacted, the more time providers who are not currently in the hot zone will have to reflect on and align themselves to the clinical decisions that may be required.

Lastly, before the COVID-19 pandemic, medicine and health care in general were working more and more toward the acceptance of multidisciplinary and transdisciplinary decision-making of complex health issues. Several academic disciplines and professional specializations draw from each other to redefine problems and solutions outside normal boundaries. This has increasingly been adapted to coronavirus treatment and triage options allowing both multiple health experts and multidisciplinary expertise to better adapt and share more optimal care plans and spread the burden of decision-making across the demands of anticipated population-based care and CSC. [30,4]

Future Considerations for Research

There is a paucity of research related to how the enactment and implementation of CSC impacts the wellbeing of healthcare providers and patients alike. Important question remain to be explored related to the timing of CSC. As guidelines are developed by international stakeholders, national governments and local health authorities these should be evaluated to determine how early implementation of CSC affects the overall quality of care and patient safety.

Conclusion

One major problem remains. Healthcare providers define public health crises along prevention, preparedness, and epidemiological dictums, that inform, educate, and empower the individual management options available to healthcare providers combined with the larger source of population-based management aggregated data.[31] From this combined analysis comes single actionable clinical approaches to save the most lives within a population-based overarching system. Unfortunately, history will show that what remains the most compelling impediment to CSC policy implementation is that governmental powers still define public health through political and economic imperatives.[32] This must change.

Data Availability

No new data were generated or analyzed in support of this review

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