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FEATURE

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The principle of salvage in the context of COVID-19

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Abstract

The prioritisation of scarce resources has a particular urgency within the context of the COVID-19 pandemic crisis. This paper sets out a hypothetical case of Patient X (who is a nurse) and Patient Y (who is a non-health care worker). They are both in need of a ventilator due to COVID-19 with the same clinical situation and expected outcomes. However, there is only one ventilator available. In addressing the question of who should get priority, the proposal is made that the answer may lie in how the pandemic is metaphorically described using military terms. If nursing is understood to take place at the 'frontline' in the 'battle' against COVID-19, a principle of military medical ethics—namely the principle of salvage—can offer guidance on how to prioritise access to a life-saving resource in such a situation. This principle of salvage purports a moral direction to return wounded soldiers back to duty on the battlefield. Applying this principle to the hypothetical case, this paper proposes that Patient X (who is a nurse) should get priority of access to the ventilator so that he/she can return to the 'frontline' in the fight against COVID-19.

KEYWORDS

COVID-19, frontline, military medical ethics, salvage, surge capacity, triage

1 | INTRODUCTION

The issue regarding prioritisation of scarce life-saving resources has a particular urgency within the context of the present COVID-19 pandemic crisis. A major concern for various hospitals is the risk of a surge capacity, especially in intensive care units (ICUs), where the supply of resources becomes overwhelmed by the volume of those in need.

This paper sets out a hypothetical case using the six recommendations of Emanuel et al. (2020). In attempting to decide which patient should get priority of access to a ventilator, the proposal is made that the answer may lie in how the pandemic is metaphorically described using military terms. If nursing practice is understood to take place at the 'frontline' in the 'battle' against COVID-19, then a principle of military medical ethics may be applicable and offer clear guidance in how to prioritise access to a life-saving resource. The principle of salvage, as proposed here, could be used as a broker principle when faced with a deadlock on how to decide between a patient—who is a nurse—and a patient—who is a non-health care worker—as well as providing an augmentation to recommendation two of Emanuel et al.'s (2020) framework.

2 | COVID-19 AND SURGE CAPACITY

COVID-19 is a serious, life-threatening, communicable disease that has sparked a major global public health crisis. COVID-19 was declared a pandemic by the World Health Organization on 11 March 2020 (World Health Organization, 2020a). The virus—SARS-CoV-2—behind COVID-19 is new (Contini et al., 2020; World Health Organization, 2020b), and the disease has been deemed to be humanity's new problem (Hatipoğlu, 2020). The outbreak, and rapid spread and incidence of this disease, has been unprecedented in contemporary times and has brought vast-scale morbidity and mortality. COVID-19 does not know any borders, and it can be contracted by any person regardless of their age, race, class, status or nationality.

Questions about the allocation of scarce resources are at the forefront of normal health care practice. But the issue becomes

more acute in the context of an outbreak of a disease. There can be a disparity between the populace's health care demands and the supply of accessible resources to meet those demands even in 'normal' economic times of a country (see Liss, 2003, p. 156). A recognised occurrence during an outbreak of a pandemic is that as the members of a country's population fall ill, the stress on the available health care service resources intensifies and there is a risk of a surge capacity (see Azoulay et al., 2020; Balicer et al., 2010; Emanuel et al., 2020, p. 2049; Farrell et al., 2020, p. 1144; Hulsbergen et al., 2020; Kuschner et al., 2007; Rubino et al., 2020; White et al., 2009). Added to this, health care professionals who are at the front of a perfect storm of an infectious disease may also fall sick because of a virus, which amplifies the volume of work for others (see Clark, 2016, p. 127). In the absence of a vaccine or an effective antiviral treatment and in an attempt to reduce the possibility of a health system—especially ICUs and other critical care provisions—becoming overstretched and overwhelmed by the volume of need, various public health measures have been imposed to flatten the curve of a possible surge capacity on the health care resources from people presenting with COVID-19. Governments have imposed restrictions on the movements of its people as well as the halting of normal social and regular commercial activity in a bid to curb the spread of the contagion. Stringent infection-transmission control measures have been taken such as habitual and thorough hand washing, respiratory etiquette, strict social distancing rules, the wearing of face coverings/masks, self-isolation for those with the virus or who are expected to have the virus (close contacts) as well as virus testing and contact tracing. All of which have had a significant impact on economies as well as on the lives of citizens. Even with successful attempts of flattening the curve, there is not an infinite supply of resources and difficult decisions may have to be taken regarding prioritisation. It is well recognised that the question regarding how scarce resources should be prioritised and distributed in an ethical manner presents considerable issues (see Kirby, 2010, p. 758).

3 | NURSING AND COVID-19

2020 is a year that will not easily fade from our consciousness for a long time to come. A year that sought to commemorate the two hundredth anniversary of the birthday of Florence Nightingale with the 'International Year of the Nurse and the Midwife' was overshadowed by the year of a global pandemic (see Bagnasco et al., 2020a, p. 2213; Daly et al., 2020, p. 2751; International Council of Nurses, 2020a, p. 4; World Health Organization, 2020c). At the same time, in an interesting twist, COVID-19 has brought to the fore of public consciousness the work of nurses and its importance as well as its real value (see Bagnasco, et al., 2020b; Catton, 2020, p. 157; International Council of Nurses, 2020b, p. 3). Not only has there been an increasing recognition and appreciation for the work done by nurses but also for the very need for nurses because of COVID-19 (Jackson et al., 2020). Considering that nurses are at the coalface of providing expert care to patients who have COVID-19, they form an important voice in contributing to protocols on provision of care (American Nurses Association, 2020, p. 2). According to the International Council of Nurses (2020a), '[n]urses are at the frontline of the response to the virus, are central to successful progress in suppressing it, and will be the mainstay of post COVID-19 health systems' (p. 2).

In its section on 'Ethical Considerations for Nurses in a Natural or Human-Made Disaster, Communicable Disease Outbreak or Pandemic', the Canadian Nurses Association's *Code of Ethics for Registered Nurses* (2017) acknowledges that nurses have always delivered and continue to deliver care, although there can be situations, such as an outbreak of a contagious disease, that pose a risk to their personal health and even to their lives (p. 38). The duty to care is led by solid expertise that is evidence-based and morally sound and which is delivered in a compassionate manner (Canadian Nurses Association, 2017, p. 38). Regarding the decision-making process for the allocation of scarce resources in the context of a pandemic, the Canadian Code (2017) instructs that decisions should be fair and that priority setting should not be opaque (p. 40). Yet, some consider that with COVID-19 such decisions have now become 'redefined' (Bagnasco, et al., 2020a, p. 2213). Although nurses seek to do what is for the good of their patients, they work within a context that is also imbued by limited resources (Ulrich, 2012, p. XIX). Considering that nursing constitutes the biggest of the health care professions working in the context of COVID-19 (International Council of Nurses, 2020b, p. 1) and is regarded to be essential to the delivery of health care (Nayna Schwerdtle et al., 2020), questions about what should happen when nurses fall ill due to that disease are critical.

4 | CASE STUDY

One critical issue that has been to the fore of the COVID-19 pandemic is the prioritisation of ventilators in ICUs. The judgement to allocate a ventilator to one patient and not to another can be the deciding factor in who will survive (Patrone & Resnik, 2011, p. 165; Truog et al., 2020, p. 1974). It can therefore generate much debate and discussion about how to prioritise among patients who are in need of a ventilator. But what about the situation where the health care team need to decide how to prioritise access to a ventilator between a patient who is a highly skilled nurse working in ICU and a patient who is not an essential health care worker, as the following hypothetical case sets out?[1]

Patient X, who is a nurse, and Patient Y are in need of a ventilator in ICU at the same time. This is due to the contraction of COVID-19, which was not their fault. They are both the same age and have the same health profile. From a clinical perspective, they are identical and their chances of survival and receiving benefits from this life-sustaining treatment are the same. However, due to surge capacity there is only

[1]This hypothetical case study is inspired by the dilemma posed by Sulmasy and Sugarman (1994).

one ventilator available.[2] *In such a situation*—ceteris paribus—*who should get priority of access to the ventilator? Should the nurse or the other patient?*

5 | RECOMMENDATIONS IN THE CONTEXT OF COVID-19

Deciding who obtains priority of access to a scarce life-saving resource and ensuring that the decision-making process is just, need to be grounded in reasons that are morally justified and convincing (Rothstein, 2010, p. 413). Triage classifies patients based on their clinical needs in the context of a crisis situation; it represents a form of rationing of resources that are available to hand (Childress, 1983, p. 551). As a method, triage seeks to obtain the greatest benefit for the greatest amount of patients by using resources in the most effective way (Childress, 1983, p. 551). The practice of triage is used in precise situations in health care (Iserson & Moskop, 2007, p. 275). Triage is initiated in situations where there is not enough supply of resources to meet an immediate pressing medical need (Iserson & Moskop, 2007, p. 275). Should there not be enough ventilators to meet the demand in ICU, triage is needed (Lotz et al., 2020).

In the context of the present pandemic crisis, Emanuel et al. (2020) purport six recommendations regarding scarce resources allocation (pp. 2051–2054). Their recommendations have been deemed to provide a triage structure during the present COVID-19 situation (Hulsbergen et al., 2020, p. 1486). The recommendations are grounded on four values consisting of (a) maximising the most benefits from the use of the resources available by securing the greatest amount of lives; (b) treating all patients in an equal manner; (c) rewarding those who have saved the lives of other people and/or are in a position to do the same in the future; and (d) giving precedence to those patients worst off in terms of health or age (Emanuel et al., 2020, p. 2051). Their recommendations are as follows (Emanuel et al., 2020, pp. 2051–2054): recommendation one is that the allocation of resources should be arranged to bring the most benefit in terms of the number of lives that can be protected and in terms of the longevity of years of those lives that were rescued. In other pandemic triage frameworks, the criteria of age in connection to other underlying conditions as well as life expectancy due to the prognosis have been referred to (see Christian et al., 2006, pp. 1378–1379; Herreros et al., 2020, p. 457; Hulsbergen et al., 2020, pp. 1486–1488; Joebges & Biller-Andorno, 2020, p. 2; Pauls et al., 2020, pp. 404–405). Other criteria have included quality of life as well as the issue of dependants (Hulsbergen et al., 2020, p. 1488, 1489). Recommendation two is that the allocation of resources should be arranged to be given to health care people at the coalface of the pandemic. This position reiterates the view that priority given to health care practitioners is not due to such workers somehow having more intrinsic value compared to others but rather that they possess an instrumental value in terms of providing a crucial care response to COVID-19 (also see Persad et al., 2009, p. 426; Satomi et al., 2020, p. 3). On a related point, to facilitate the adequate supply of staff, it has been argued that health care workers may get priority of access to the vaccine for the flu in situations of a contagious outbreak (Beauchamp & Childress, 2019, p. 312). Recommendation three is focused on patients who are in a similar situation in terms of their outcomes. Equality should be the driving force behind this allocation of resources, which should be arranged by a lottery system. Recommendation four is that allocation of resources should be arranged on evidence-based knowledge of this new virus that is evolving. Recommendation five is that the allocation of resources should be prioritised for those who have taken part in research for treatments for COVID-19. Finally, recommendation six is that the allocation of resources should not differentiate between those who have and those who have not COVID-19.

Using the above recommendations as a broad framework, which of our two patients, Patient X or Patient Y, should get priority of access to the ventilator? Following recommendation one, the allocation of ventilators should be arranged to bring the most benefit in terms of the number of lives that can be protected. If it is not possible to allocate a ventilator to both Patient X and Patient Y, then the longevity of years post-treatment needs to be taken into account. Let us suppose that on these criteria, the number of post-treatment years projected would be relatively the same, then we would still be left with a dilemma.

It has been argued that the maximisation of patients' health is the endorsed principle for allocating priority of resources from an economic perspective (Olsen, 1997, p. 625; also see Cookson & Dolan, 2000, p. 326). Following in the thought of Cookson and Dolan (2000), in the case of Patient X and Patient Y, the question would be which of the two is set to obtain the greatest net benefit for the rest of their lives (p. 326). As part of this, indirect consequences should be considered, that is the consequences of giving the ventilator to one (as opposed to another) (see Cookson & Dolan, 2000, p. 326): Should Patient X be given the ventilator, it is clear that Patient Y will lose out but what would be the indirect consequences for other patients in that ICU? Similarly, should Patient Y be given the ventilator, it is clear that Patient X will lose out but what would be the indirect consequences for other nurses who may become patients in that ICU? All of this is still beset with the usual difficulties of attempting to predict actual or probable outcomes. Saving Patient X (who is a nurse) might lead to more patients in the future being saved. Saving the Patient Y may also lead to more patients in the future being saved should Patient Y have a significant role to play in the search for a vaccine for COVID-19.

Applying recommendation three to Patient X and Patient Y, the allocation of a ventilator could be arranged by a lottery system. There are, nonetheless, some issues with a lottery system. For example, the question has been raised whether there is a relinquishing of responsibility by leaving a decision to the luck of a draw (Antommaria et al., 2011, p. S166; Winslow, 1982).

[2]For the purpose of this case study, the staff do not have access to ventilator splitters.

Regarding recommendation four, the prognosis of both Patient X and Patient Y would need to be considered. Maximising benefits requires consideration of the prognosis. If both do not have any underlying medical conditions or if both have the same, then it is difficult to determine who should get priority.

If neither Patient X nor Patient Y has taken part in research for a cure or a therapeutic treatment, then recommendation five may not apply. Similarly, given that both patients have been diagnosed with COVID-19, recommendation six may not be pertinent.

Finally, following recommendation two, on first reading, it would appear that Patient X, who is a nurse, should get priority. Satomi et al. (2020) state that: 'Health professionals are essential to tackle the crisis generated by the pandemic [...] their care should be prioritized, aiming at a faster recovery and return to work capacity. [...] The concept is to save the life of those who can save more lives [...]' (p. 2). Priority of access to resources based on instrumental value is, however, controversial (Hulsbergen et al., 2020, p. 1489). Referring to Aristotle's understanding of formal justice, Kirby (2010) reminds us of how formal justice necessitates that people ought to be treated equally but exceptions can be made if there are pertinent differences between people that would ethically substantiate any variation in how they are treated (p. 759). Does being an essential, highly skilled nurse who works in ICU make a relevant difference for Patient X? Considering that the COVID-19 pandemic crisis has been linked to a war in a metaphorical sense, the proposition of this paper is that this description may indicate a pathway towards finding a possible answer. If we treat COVID-19 metaphorically as a war, then principles of military medical ethics may be applicable and offer guidance on how to prioritise access to a life-saving resource between Patient X and Patient Y. Given that nursing and medical practice work together (Melia, 1994, p. 7) and share common ethical principles, to look towards medical military ethics in this case would not be out of place.

6 | MILITARY METAPHORS

It may seem odd that a caring profession and the field of ethics would draw from the metaphors of war in terms of decision-making. Given its devastating nature, war is normally accepted to be inexplicable from an ethical perspective (Lee, 2012, p. 1). Yet, metaphors relating to wars and battles permeate the language of health care when describing its work against various diseases (see Parsi, 2016). There is the language of staff on the 'frontline', as it were, putting their lives at risk in the service of the health needs of others (see Iserson et al., 2008, p. 345; Kuschner et al., 2007 p. 16; Marshall et al., 2011; Pahlman et al., 2010, p. 9; Simonds & Sokol, 2009, p. 307). There is also the language of 'fight' (see Fuks, 2009, p. 58; Hodgkin, 1985, p. 1820; Iserson et al., 2008, p. 345; Jalloh et al., 2019, p. 1497), 'war' (see Cairns, 1985; Casarett et al., 2010, p. 256; Fuks, 2009, p. 57; Klein, 1999; Malm, 2016; Mongoven, 2006), 'battle' (see Fuks, 2009, p. 58; Hodgkin, 1985, p. 1820; Mongoven, 2006, p. 404), as well as illnesses being viewed as 'enemies' (see Malm, 2016, p. 20), and there is the language of 'reporting for duty' (see Balicer et al., 2010; Kagan et al., 2017; Qureshi et al., 2005). It can be the case that the ubiquitous use of such language can lead to an amnesia of its engendering warfare context.

Metaphors drawn from a military context are often used in health care (see Fuks, 2009, p. 58; Hodgkin, 1985; Mongoven, 2006, p. 404; Nie, et al., 2016a, p. 3; Tate & Pearlman, 2016). This is particularly the case in the context of a medical intervention for a disease (Chiang & Duann, 2007, p. 581). Such use of language helps to contribute to a feeling of an emergency in the face of a shared danger that demands a shared response (Chiang & Duann, 2007, p. 581). Such employment of metaphors in the context of medical care has been traced as far back as the seventeenth century (Lane et al., 2013, p. 282; Nie, et al., 2016a, p. 4). Using the language of 'wars' on illnesses has become more and more prominent in contemporary times (Nie, et al., 2016a, p. 4).

Lakoff and Johnson (1980) claim that the '[...] *essence of metaphor is understanding and experiencing one kind of thing or experience in terms of another*' (p. 455). The language of 'frontline' and other war terminology is often used to describe the situation in which health care professionals find themselves when there is a sudden outbreak of a pandemic (e.g., Clark, 2016, p. 125). In responding to the health needs of the population impacted by the new communicable COVID-19 disease and by putting themselves directly in the path of its contagion, hospital staff are deemed to be on the 'frontline' of this emergency. The Director-General of the WHO, Dr Tedros Adhanom Ghebreyesus has said that '[w]e are at war with a virus [...]' (World Health Organization, 2020d).

7 | PRINCIPLE OF SALVAGE

If nursing practice is understood to take place at the 'frontline' in the 'battle' against COVID-19, then a principle of military medical ethics may be applicable and offer helpful guidance in how to prioritise access to a life-saving resource in our hypothetical case. In military medical ethics, the principle of salvage is about returning wounded soldiers back to the frontline of the battlefield (Gross, 2008a, p. 3; also see Olsthoorn et al., 2013, p. 85). It is the situation of necessity that steers the provision of medical practice in the context of a war (Gross, 2008b).[3] According to Gross (2006), in a context of war, military medicine's objective is salvage, whereas outside of this context, medicine's objective is about saving lives (p. 73).[4] For example, combatants are not medically cared for as individual patients—as would be the case in normal medical practice—but rather as part of a whole,

[3]My focus is not on Gross' various positions regarding military medical ethics and the health care rights of soldiers but on the principle of salvage as applied in the context set out above.

[4]Gross' overarching thesis is that medical ethics during peacetime is different to medical ethics during a time of warfare, which would be in contrast to the position of the World Medical Association (2012) (Gross, 2004, p. 22; Gross, 2006, pp. 1–2, 15).

that is as part of an armed force (Gross, 2004, p. 24). The principle of salvage steers the latter. Access to scarce medical treatment in a situation of war is framed in the context of a 'salvageable value' (Gross, 2004, p. 24). The principle of salvage directs the duty to salvage as many individual soldiers as possible and return them to the frontline as a collective (Gross, 2004, p. 24; Gross, 2008a, p. 4). The focus of the salvage principle of returning soldiers to the frontline is driven by military necessity in the context of a war where health resources are not abundant (Gross, 2006, p. 95; Gross, 2008a, p. 6). General principles of medical practice are then deemed to be applied to those who have no prospect of going back to the frontline (Gross, 2008a, p. 3). There is the humanitarian obligation to treat those who cannot return to the frontline in the same way as others (Gross, 2006, p. 95, 98).

Returning to our hypothetical example of Patient X (who is a nurse) and Patient Y, if we use military metaphors to describe the present context of nurses working on the 'frontline' in the battle against COVID-19, then this principle of salvage could be pertinent in an attempt to resolve this case. Just as in military medical practice, public health is focused mainly on collective shared interests rather than individual interests. Priority of access to scarce medical treatment in the context of a 'war' against COVID-19 could be framed in the context of a salvageable value. If military battlefield medical care is concerned with salvaging the lives of combatants so they return to the frontline to fight in a war, then in this 'war' against COVID-19, shouldn't nurses who are wounded by COVID-19, also be returned to the 'frontline' as soon as possible? If this be accepted, then the principle of salvage in the context of COVID-19 would steer the decision to return Patient X (who is a nurse) to duty on the 'frontline'. Therefore, in this case, Patient X should get priority of access to the ventilator under the principle of salvage. The salvage principle would look at the nurse not as an individual patient but rather as part of the collective workforce of nurses in the battle against COVID-19 so the objective here would be to return as many nurses as possible to the frontline to care for patients (see Gross, 2006, p. 142). Although the principle of salvage may be primarily a macro-level principle (Gross, 2008b, p. w1), it provides clear guidance in the context of our hypothetical case. Expanding on the thought of Gross (2004, p. 24; Gross 2006, p. 95), if Patient X (who is a nurse) cannot be returned to the 'frontline' of care, then he/she would forego his/her claim to the use of scarce resources under the principle of salvage and would be treated in the same way as non-health care practitioners (like Patient Y) in terms of the triage criteria of accessing resources, such as the other recommendations of Emanuel et al. (2020).

Suppose that we amend our hypothetical case study and substitute Patient Y with Patient Z, who is also a nurse, how should we decide between the two nurses using the principle of salvage? The decision between the two nurses would be based again on salvage, that is which of the two nurses is expected to resume his/her duties again at the 'frontline'. If there is no prospect of Patient X or Patient Z returning to the 'frontline' because of their illness, then either one would forego their claim to the use of ventilator under the principle of salvage and should be treated in the same way as Patient Y in terms of the criteria of accessing resources.

Another question is whether to apply the principle of salvage beyond the case of two equally ill people with equal chances of surviving. For instance, should the principle of salvage be used in priority decisions in the context of COVID-19 when faced with deciding to provide a ventilator to either a non-health care patient or a nurse (or indeed any health care practitioner needed on the 'frontline') even if their clinical needs are different? At a first glance, it may seem out of step with traditional health care ethics to suggest giving priority to one patient over another because they are a nurse. At the same time, this may not be completely out of step when placed in the context of the development of the practice of triage. The originating context of triage is one of the military medical practices, and the originating use of the term has been traced back to Dominique Jean Larrey, who was a prominent figure in the armed forces of Napoleon (Baker & Strosberg, 1992, p. 103; also see Childress, 1983, p. 548; Edwards, 2009, p. 1515; Frykberg, 2005, p. 272; Gross, 2006, p. 18; Iserson & Moskop, 2007, p. 277; Katoch & Rajagopalan, 2010, p. 304). Larrey's practice of triage was focused on providing priority of treatment to those soldiers who had the most pressing medical need due to their injuries sustained on the battlefield (Iserson & Moskop, 2007, p. 277). In his account of the history of triage, Kirby (2010) points out that, from a British perspective, priority regarding treatment was granted to medical practitioners so that they could resume their duties in the context of a war (p. 758). Referring to the work of Albert Jonsen and Paul Ramsey, Baker and Strosberg (1992) show that triage had a utilitarian focus on rescuing the maximum number of salvageable injured people who could further the good of all in the context of a disaster or a war (pp. 103-104). When triage is applied in a normal acute hospital setting, it is focused on providing priority of access to pressing treatment to those due to the gravity of their condition (Frykberg, 2005, p. 273). The issue of salvageability of the patient is brought into the equation in the further context of a major incident in which the strain on limited resources becomes more acute (Frykberg, 2005, p. 273). The principle of salvage can be found in triage in a mass casualty context where health care resources are far from plentiful; this is in contrast to the normal practice of triage when there may be sufficient provisions to provide medical treatment for all (Gross, 2006, p. 145).

However, there may be two potential problems with applying the principle of salvage: first, the issue of using military metaphors to describe the experience of nursing practice in the context of a pandemic; second, the risk of the fallacy of the undistributed middle.

First, metaphors not only denote how reality is experienced but they also engender a particular experience of reality (Vallis & Inayatullah, 2016, p. 134). According to Vallis and Inayatullah (2016), metaphors are '[…] pervasive in our thoughts and actions because the ways in which we think, perceive and act are metaphorical in nature. Our conceptual system is metaphorical, thus we experience the world in metaphors' (p. 133). Military metaphors have generally been employed to describe the experience of COVID-19 and to communicate a particular response to it. Humanity's experience of

the coronavirus thus far is that of a sudden, unknown and relentless aggressor, and our response is one of hostility towards it armed through health care and science. At the forefront of providing care to those who fall ill because of the disease are nurses. This frontline position has been described as the 'most extreme of circumstances' (Maben & Bridges, 2020, p. 2742). By using military metaphors to describe this experience, we are relating two experiences—one of care and one of war—with the aim to initiate a particular active response.

However, the use of military metaphors in health care has been questioned (see Bleakley, 2017; Fuks, 2009; Hodgkin, 1985; Larson et al., 2005, p. 244; Malm, 2016; Mongoven, 2006; Nie, et al., 2016a; Trachsel, 2016; Vallis & Inayatullah, 2016, p. 135). For example, one of the consequences of using military metaphors is that the disease becomes the central focus of attention rather than the actual patient (Fuks, 2009, p. 60). This employment of military metaphors has been described as an '[…] ontologization of illnesses as independently recognizable disease […]' (Fuks, 2009, p. 59; also see Hodgkin, 1985, p. 1820). Military metaphors can lead to blame being positioned on individuals for how they live their lives and how they care for themselves (Vallis & Inayatullah, 2016, p. 139).

If medicine is the "art and science of healing", how can this be squared with the language of war (Nie, et al., 2016b, p. w9)? A similar point could be made about nursing considered as an art and a science of caring. Nursing draws on various strands that constitute it as a profession, including clinical expertise and the skill of expert care within the scope of practice. According to *The ICN Code of Ethics for Nurses* (2012), the following are the main roles of nurses: '[…] to promote health, to prevent illness, to restore health and to alleviate suffering' (p. 1). Nursing practice is directed by the obligation to care for the patient and to do what is in their best interests (Morley et al., 2020, p. 36). The manner in which expert care is delivered to patients and the decisions and actions that underpin this constitute the 'ethical domain' of nursing (Scott, 2017, p. 3). It is generally taken as read that care is at the bedrock of professional nursing practice and nurses carry—or should carry—out their care for their patients with compassion (Sellman, 2011, p. 17). For Chambers and Ryder (2009), nursing, care and compassion are all interlinked: compassion is at the heart of caring and consequently at the heart of nursing as well (p. 2; also see Hem & Heggen, 2004; Straughair, 2012, p. 160). Indeed, care/compassion has been deemed to be the '[…] most precious asset' of nursing practice (Schantz, 2007, p. 48).

At the same time, nursing practice has been no stranger to military metaphors. Compared to other professions, military metaphors have had a preeminent influence on the milieu of nursing (Mitchell et al., 2003, p. 48). Metaphors have been used to define the duty of loyalty expected of nurses towards those in charge, towards their medical colleagues and towards their patients (Wurzbach, 1999, p. 95). Military metaphors are also reflected in nursing's hierarchical structure, which was particularly prominent towards the end of the nineteenth century (Wurzbach, 1999, p. 95). Nursing, as we understand it today, has also emerged from a context of war (Tschudin & Schmitz, 2003, p. 354; also see Fee & Garofalo, 2010, p. 1591; McDonald, 2014; Mitchell et al., 2003, p. 49). Modern nursing's great inspirer and reformer, Florence Nightingale carried out nursing care for combatants during the Crimean War (Mitchell et al., 2003, p. 49; also see Fee & Garofalo, 2010, p. 1591).

Another potential problem concerns the fallacy of the undistributed middle. In the discipline of logic, as it has derived from Aristotle, the middle term in a categorical syllogism refers to the common term between two premises. As Rice (2010) explains, this type of syllogism is categorical because it uses categories to designate people, that is it allocates persons into categories (pp. 92–93). Take the following example:

> Nurses work on the frontline against COVID-19.
> John works on the frontline against COVID-19.
> Therefore, John is a nurse.

In this example, 'work on the frontline against COVID-19' is the common term between the two premises, but it is undistributed in both premises. As a result, the syllogism is not valid. There are people who are not nurses, yet work on the frontline of care against COVID-19. Although John is an example of someone who works on the frontline, it does not mean that there is a logical link between John and nursing because of working on the frontline—following in the thought of Rice (2010, p. 93). John could be a doctor or a paramedic. To take another example:

> All nurses work on the frontline against COVID-19.
> All those who work on the frontline against COVID-19 should get priority of access to life-saving treatment.
> Therefore, nurses should get priority of access to life-saving treatment.

There is no undistributed middle in the above syllogism as the term 'work on the frontline against COVID-19' is distributed in the second premise. The syllogism is, therefore, valid. As Şahin (2016) explains, '[…] if the proposition is about all members of the class that the term refers to, this term is distributed; if it is about only a part of it, it is undistributed' (p. 118).

However, the proposition that 'nurses work on the frontline against COVID-19' could be interpreted as either 'all nurses work on the frontline against COVID-19' or 'some nurses work on the frontline against COVID-19'. Interpreted in the first sense, the term 'nurses' is distributed in the statement. Interpreted in the second sense, the term 'nurses' is undistributed. It may be correct to say that nurses—qua group—are on the frontline against COVID-19 but without good reason, that is it would be questionable to assume that any particular nurse is on the frontline against COVID-19 simply because he/she is a nurse. Being a nurse does not necessarily entail working on the frontline of care against COVID-19. Although there are common properties shared between all nurse practitioners, they are not all the same. Some nurses, for example, specialise in paediatrics, or psychiatry or geriatrics.

Given the potential limitations of using military metaphors and the need to ensure that we avoid falling into the trap of the

undistributed middle, as well as the fact that the future cannot be predicted regarding the consequences of choosing either patient, the principle of salvage, as proposed here, should only be used as a broker principle. In other words, the principle of salvage should be used when faced with a deadlock on how to decide between a patient who is a nurse working on the frontline of care against COVID-19 and a non-health care patient when there is an equilibrium regarding their medical needs and outcomes. Given the general thrust of health care ethics and the fact that military metaphors to describe the context of COVID-19 are *metaphors* (although the experience can still seem unnerving as in the context of a war), the position of this paper is that the principle of salvage could be invoked as a last resort rather than as a point of departure in ethical decision-making in cases that seek to decide on how to give priority to a life-saving treatment between a patient, who is a nurse on the frontline of care against COVID-19 and a patient who is a non-health care worker. Should a triage set of principles not lead to a clear answer that is morally robust, the principle of salvage would then be useful. In addition, the principle of salvage could augment recommendation number two in the framework of Emanuel et al. (2020).

8 | CONCLUSION

The decision regarding to whom to allocate a ventilator within the context of a pandemic is deemed to be the 'toughest triage' (Truog et al., 2020, p. 1973). The proposal of this paper is that given that war metaphors are invoked to describe context of COVID-19, military medical ethics provides a pathfinder to resolving our hypothetical case: the principle of salvage would purport that Patient X (who is a nurse) should be given priority so that he/she can return to the 'frontline' to help save other lives. The principle of salvage could support and augment recommendation number two in the framework of Emanuel et al. (2020). At a more macro-level, decisions about allocation of resources during a time of crisis are guided and informed by policies and by political decision. However, this should not take away from the need to have discussions and debates by health care practitioners and by the wider public about the values and principles that should guide ethical decision-making in the context of limited resources.

The COVID-19 pandemic has brought the issue of priority setting of resources in the context of a surge capacity to the fore. How are choices to be made with scarce resources while serving the collective good continue to be pressing in the context of a pandemic. The COVID-19 crisis has also brought to consciousness the prospect of new unknown viruses and ensuing epidemics and pandemics that may have significant impacts on health care resources in the future. In such contexts, in facing decisions about prioritisation of limited resources, the principle of salvage may become more and more of interest to the wider health care community and to ethical decision-making in nursing and health care beyond its original military medical context.

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