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Withholding Medical Interventions and Ageism During a Pandemic

A Model for Resource Allocation Decision Making

Susan E. Lowey, PhD, RN, CHPN, CNE, FPCN

Decisions surrounding withholding and withdrawing medical interventions are common within the palliative and hospice care community. The unexpected effects of the recent pandemic ignited conversations about scarcity of resources and withholding medical interventions, based on age, among providers with limited expertise in palliative care. Using a case study and literature review, the aim of this article was to examine the best ethical considerations for resource allocation decision making that minimizes the effects of ageism. Public health ethics differs from clinical ethics by giving priority to promoting the greatest good over the protection of individual autonomy. This divide in ethics sheds light on the dangers associated with ageism. Age is often a component within clinical instruments that guide clinicians with allocation decisions. Basing decisions solely on age without evaluating health and functional status is dangerous and further propagates the discriminatory practices that fuel ageism. Previous research identified using ethical principles to guide resource allocation decisions but that may not be enough to protect the rights of older adults. A new model to guide these decisions should include advance directives and goals of care, medical indicators instead of demographics, functionality, transparent medical team, and impact of social determinants of health.

KEY WORDS
ageism, aging, ethics, pandemic, resource allocation, resources

Decisions surrounding withholding and withdrawing care are common within the palliative care community. Palliative care clinicians assist patients who have serious and terminal illnesses with end-of-life decision making after soliciting their goals of care. Often, this includes decisions surrounding withholding or withdrawing medical interventions. The unexpected effects of the recent pandemic heavily burdened the health care system and ignited conversations about withholding medical interventions among providers with limited expertise and familiarity with palliative care. Providers and clinicians who had never had the burden of making decisions about resource allocation and withholding interventions were now confronted with these cases at alarming rates. Eight of every 10 deaths from coronavirus disease 2019 (COVID-19) have been in older adults.[1] Discussions surrounding scarcity of resources and withholding interventions based on age were taking place. The purpose of this article was to present a case that occurred during the initial months of the COVID-19 pandemic and to describe the ethical issues that arose. In conjunction with a review of the literature, we developed a new model for resource allocation decision making that minimizes the detrimental effects of ageism.

Withholding Care

In the context of palliative care, withholding interventions is defined as forgoing the initiation of a life-sustaining medical intervention.[2] The rationale for not initiating life-sustaining interventions is often based on weighing the burdens with the benefits on the patient's quality of life. The patient and/or family are central to making the decision to withhold life-prolonging interventions. End-of-life decision making relies on autonomy, in which patients have the right to make decisions about their medical care. Therefore, withholding interventions is aligned with fostering patients' wishes for their medical treatment.

During the COVID-19 pandemic, there was a scarcity of resources, particularly ventilators. This was an impetus for ethically charged conversations across the nation about denying certain patients' life-sustaining medical treatments, such as mechanical ventilation. Advanced age was one of the demographic characteristics associated with the population of patients who may be denied medical interventions. The ethical dilemma lies in that this denial of life-sustaining treatment would not be voluntary or

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align with the patient's wishes. There was a potential for thousands of people to die based on these decisions. The standard of care in which hospitals and clinicians would be judged in a court of law during a pandemic is far different than the standard of care during endemic times.[3]

Ageism

Ageism is the discrimination of individuals based on their age. São José and Amado[4] formally defined ageism as "negative or positive stereotypes, prejudice, and/or discrimination against (or to the advantage of) an individual based on chronological age." They also suggested that ageism can be "self-directed, other-directed, implicit, or explicit and can be expressed on a micro, meso, or macro-level." The messages that an individual learns about older adults often begin in childhood and are based in myths or exaggerations. These messages are found in every aspect of life; in the media, workplace, news, and marketing, the message is clear: being young is more desirable than maturity.

Previous research suggests that poor attitudes by health care professionals toward older adults can have a negative effect on patient outcomes.[5,6] In health care, age is often used by clinicians to anticipate the development of certain age-related changes and subsequent conditions that may occur. An individual's age is also often factored in to determine the best course of treatment, specifically related to potential adverse effects associated with medication management. Age is often a component within prognostic models that guide clinicians with resource allocation decision making.[7] The APACHE II (Acute Physiology and Chronic Health Evaluation II) score is a clinical tool that uses age, among other factors, to predict patient mortality.[8]

Resource Allocation

Resources within the health care domain are defined as the materials, personnel, facilities, and funds that are used for providing health care services.[9] The distribution and allocation of these resources during times of crisis can pose ethical challenges and dilemmas. The goal of the health care institution is to maximize the utility of their resources, which means to get the greatest value possible. This has both economic and social undertones. The COVID-19 pandemic greatly challenged health care institutions with how, when, and which resources might need to be allocated.

During normal endemic periods, which are the usual level of disease, resources are provided to patients whose condition warrants it and within patients/families who elect to receive that medical intervention. Triage of patients during an epidemic and/or pandemic is based on utilitarian principles, which are to do the greatest good for the greatest number of people.[10] This is the guiding principle on which public health and public health ethics were founded. The World Health Organization[11] provides ethical considerations for the prioritization of patients to access scarce resources during COVID-19. Equality, utility, and prioritizing those who are the worst off and those who are on the frontlines caring for COVID patients are the 4 considerations provided. Although equality is included, it appeared that resource allocation decisions were largely based on utility, which entails using the available resources to save the most lives possible.[11]

PRESENTATION OF THE CASE

Ana K. is a 72-year-old active grandmother of 17 grandchildren. Her medical history has been remarkable and includes a cholecystectomy in 1995, osteoporosis, and arthritis in her hands from her many years working as a typist for an attorney's office. She is active in her church and local food shelter. She has no known cognitive or memory issues. She is a widow (husband passed away in 2011) and lives alone. In April 2020, the COVID-19 pandemic was attacking the Northeastern United States, where Ana resides. She woke up with body aches that progressively became worse throughout the day. By evening, she developed a fever of 102°F, throbbing headache, and dry cough. Her cough became worse over the next 2 days, and Ana began to have difficulty breathing. Her shortness of breath continued to worsen, even at rest. She called her daughter and said, "My breathing and cough are getting worse, especially since this morning I could not catch my breath. Something is wrong."

Her daughter called Ana's primary care provider to find out where she should take her mother for care because she heard on the news that doctors' offices were not seeing patients because of COVID. The provider who was on-call stated, "Well, I hope this is not coronavirus because at her age, she would never survive it." The provider also said that if Ana's breathing became worse than her baseline, she should go to the emergency room. Ana's daughter said that her mother does not normally have any shortness of breath or breathing troubles, and the on-call provider said that "her lung capacity is reduced due to her age, so even if she does not have a formal breathing issue, she likely has some underlying age-related lung disease." Ana was transported to the emergency room and given a COVID-19 test along with a chest x-ray. Ana had not traveled outside of the country or had any contact with anyone who has. She was placed on 5 L via nasal cannula with her O_2 saturation at 88% and dropping to 78% with exertion. Normal saline and albuterol nebulizers were given every 2 hours, Ana's condition continued to worsen. Ventilator mask was placed at 28% and increased to 40% at 92% SpO_2. Ana became diaphoretic, tachypneic, and tachycardic.

Ana was receiving care at a large medical center teaching hospital in a moderately sized urban city in the Northeast United States. The depletion and shortage of ventilators were occurring in the state in which Ana lived

and affecting the hospital where she was receiving care. Hospital administrators and attending physicians were developing plans for conserving the ventilators they had remaining and were communicating with their local and state officials in attempts to try to obtain more. In the meantime, they had begun to ration ventilators, reserving them for patients with a higher likelihood of survival from COVID-19. The hospital was using the following prognostic factors when determining which patients would qualify for ventilator support: comorbidities, age, sex, lymphocyte count, C-reactive protein levels, body temperature, creatinine, and imaging. Based on these factors, Ana and her family were informed that because of her advanced age, body temperature, and imaging results, she would not qualify for a ventilator, in the event her condition worsened to the point where it was warranted.

Ana and her family were both surprised and upset by this information given the fact that she is normally in very good health with no major underlying medical conditions. Ana's daughter wanted to have a family meeting to discuss their concerns and available options. The attending physician agreed to a meeting, but informed her that because of the uncertainty associated with the pandemic, there would be little he could do to change Ana's status in regard to allocation of life-sustaining resources, such as ventilator support. He said, "We need to save the ventilators for patients we feel would have a better chance of survival." Ana's daughter also reached out to the hospital ethics board to file a complaint about the processes used that would prohibit her mother from receiving ventilator support if she should require it. At the ethics board meeting, she specifically wanted to inquire about what specific protocol the hospital was using to determine which patients were eligible to receive ventilator support. The response from the ethics board was: "I'm sorry. We cannot provide you this information because it would be a HIPAA (Health Insurance Portability and Accountability Act) violation." Ana's daughter reiterated that she did not want to specifically inquire about her mother's situation and only wanted to find out what clinical tools or assessment or criteria their resource allocation decisions are based on. She never received a concrete answer.

To the hospital's surprise, Ana's condition improved, and she was discharged home after an 11-day hospital admission. Neither Ana nor her family ever received the answers to their questions about the processes used by providers for resource allocation decision making. Ana felt that the hospital lacked transparency about their decisions, and she also felt discriminated against based on her age. She told her daughter she will think twice before going to that hospital, or any hospital again if age is the only factor used in these decisions.

ETHICAL CONSIDERATIONS

The presentation of Ana's COVID-19 medical emergency and subsequent hospitalization experience have been all too commonly occurring among the population of older adults nationally and globally since the inception of the pandemic. It was evident from the presentation of her case that she was not only a victim of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), but also the unexpected recipient of ageism. Although it cannot fully be determined from this case whether the discrimination against Ana was purposeful or accidental, nonetheless, it occurred. In the following section, each of the ethical issues presented in the case, and how/if they were resolved, will be discussed.

Unfounded Assumptions About Age: Nonmaleficence

Several of the statements made by the on-call provider were negative and stereotypical in nature. Not only is it unprofessional to tell a family member that her loved one would never survive coronavirus, but also the provider specifically said it was due to her age. The provider also made an assumption about Ana's health and breathing status based solely on her age. If Ana's breathing became worse than her baseline, the provider instructed her to go to the emergency room. When Ana's daughter informed the provider that her mother typically does not have problems with her breathing, the on-call provider said that "her lung capacity is reduced because of her age, so even if she does not have a formal breathing issue, she likely has some underlying age-related lung disease."

In this exchange, the only possible truthful statement made by the provider was that there are age-related changes in the lung that take place. There was nothing for the provider to base Ana's baseline breathing as compromised, and in this particular situation, it was not warranted to ever tell the family member that her loved one would never survive the potential affliction due to advanced age. This violates the principle of *nonmaleficence*, which means do no harm. Although the on-call provider most likely did not have bad intentions, the manner in which he responded to Ana's daughter did invoke a level of harm. Hearing that your loved one will "likely not survive" not only is not professional, but also could cause unnecessary worry and harm.

Using Age as an Arbitrary Criterion: Beneficence and Justice

While hospitalized, Ana and her family were informed that in the event she required ventilator support, she would not receive it unless circumstances changed because of the pandemic, and they would have to enact their reallocation processes. This would only occur if there are more patients

in need than there are resources. The attending provider explained that this decision was based on several factors including comorbidities, age, sex, lymphocyte count, C-reactive protein levels, body temperature, creatinine, and imaging. In Ana's particular case, age was identified as the first factor followed by her increased body temperature and imaging results. At that time, providers, health care institutions, and public health officials had very limited knowledge about the facets of COVID-19. It appeared to have a higher attack and mortality rate in older adults; however, scientific evidence that fully supported this notion was scarce. Age is often a component of clinical instruments that guide clinicians with prognostication. During the COVID-19 pandemic, many of these clinical tools were also utilized for resource allocation decision making.

This violates the principles of *beneficence*, which means to do good, and *justice*, which means fairness and the right to receive resources. Although Ana would only be denied ventilator support in the event the hospital had to reallocate resources, age seemed to be the prevalent rationale behind why she would not be eligible. Beneficence is doing no harm and doing what is fair and just. In Ana's situation, as a relatively healthy individual, she was told she would be denied an essential life-sustaining intervention if the needs of others outweighed her needs, which was largely based on age.

Lack of Transparency and Trust: Respect for Autonomy

At the ethics committee meeting that Ana's daughter had requested, she hoped to receive concrete answers about how the decision to potentially withhold ventilator support from her mother was made. This was not the case, and a representative from the ethics board told her that information could not be shared because it would be a HIPAA violation. The role of the hospital ethics board is to help ensure that the highest ethical standards in patient care are upheld. As Ana's health care proxy and power of attorney, her daughter had the right to be informed about the policy and processes that were used to determine eligibility criteria for resource allocation. The policy information would not be a direct violation of HIPAA, particularly because the daughter is the Ana's official health care proxy.

After Ana was discharged, she and her family felt a level of mistrust toward the hospital and health care professionals they encountered. This lack of trust toward the health care system will likely impact Ana's future decisions about the care she will seek. This violates the principle of *respect for autonomy*, which means that an individual has a right to make their own decisions. This principle was violated when the ethics board did not disclose the procedures used in the hospital reallocation decision-making process with Ana's daughter, who was her health care proxy.

Making unfounded assumptions about age, using age as an arbitrary criterion for resource allocation decision making, and lack of transparency on the part of the health care team are serious ethical concerns that arose from Ana's case. In order to address these ethical issues, a literature review was conducted in order to develop a new model for resource allocation decision making that minimizes the detrimental effects of ageism.

METHODS

Medical databases were searched using keywords including *end-of-life/palliative care*, *resource allocation*, *withholding/withdrawing care*, *pandemic*, *public health*, and *ethics*. Articles published between 2010 and 2020 on resource allocation decision making were included. Review articles or those that did not meet minimum quality score were excluded. Thirteen articles were included in the analysis. Study purpose, sample, design, and results were extracted from each article. Using the matrix method,[12] commonalities were further analyzed both within and across the sample.

RESULTS

Public health ethics differs from clinical ethics by giving priority to promoting the greatest good over the protection of individual autonomy.[13] Resource allocation decisions are most often based on the greatest number of lives saved and probability of survival to hospital discharge. This divide in ethics shed light on the dangers associated with ageism. Prioritizing patients who are most expected to survive examines only the short-term prognostic expectations and does not factor in other criteria. The Sequential Organ Failure Assessment score is one of the most widely used and cited clinical tools used to predict mortality.[13] This and other short-term mortality indicators offer only a few specific categories that may be difficult to fit patients equally. Short-term mortality should not be the only factor to be considered.

The literature identified broad social value as a detrimental aspect that contributes to ageism. Broad social value is an individual's overall worth to society, and older citizens are often not considered high in this regard. As a society, older citizens are discriminated against and are not always thought of as contributing members of society. Many of the clinical prognostic indicator tools rely on age, and basing decisions solely on age without evaluating health and functional status is dangerous and further propagates the discriminatory practices that fuel ageism. For example, Ana, in the case presented, is 72 years of age but is in remarkable health with no chronic conditions that would interfere with her ability to fight off a COVID-19 infection. In her case, health and functional status were relatively high. This is why it is important to evaluate each

individual patient because age alone does not provide information on health or functional limitations.

Maximizing life years involves prioritizing individuals who are expected to have more years of life left, and this should be avoided as using age automatically disadvantages older adults. Maximizing patients with those who are believed to have the most longevity requires judgment calls that are subject to discriminatory social biases no matter how implicit they might be.[14] Warnings against using chronological age repeatedly came up in the literature, and it was strongly suggested that it should not be a sole criterion for determining risk or access to medical care.[15] Other factors that may put some people at an increased risk for direct and indirect negative outcomes of COVID-19 should be examined instead of age.

In a position statement from the American Geriatrics Society on COVID-19, it was recommended that health care institutions develop committees to develop and refine policies for resource allocation and ensure their transparency.[16] Advance care planning was also identified as vital to resource allocation during times of crisis. In palliative care, we know that ensuring the completion of advance directives before the patient becomes ill is essential. It is most important now to ensure that all adults, older adults in particular, have identified their wishes for life-sustaining therapies so that health care providers could know which patients do not wish to receive this type of care.

Resource Allocation Model

The Resource Allocation Model (Figure) was developed to address the ethical issues that were identified in Ana's case, in conjunction with best practices identified in the literature that have been presented in this article. Eliciting advance directives and patient goals of care is at the center of the model because this is the first action that should be addressed by the health care team. This is important because if the patient's goals of care do not include curative management of their medical condition and their medical wishes do not include cardiopulmonary resuscitation or intubation, then that would dictate the subsequent actions taken by the health care team in the care of that patient. To avoid ageism, it is preferable to use medical indicators for prognostication and resource allocation instead of basing decisions heavily on demographics. Examining the patient's functional status and abilities is preferred over using chronological age alone. Clinicians also need to factor in the effects of social determinants of health with decision making, ensuring that access to care and resource allocation are not based on social, economic, or environmental factors and that equity, social justice, and fairness are preserved. Lastly, to combat negative public perceptions that may have been created as a result of media portrayal of ventilator rationing, ensuring the utmost transparency with decision making and resource allocation is essential. Health care systems have an ethical obligation to provide the public assurance in the provision of quality care that is safe and equitable for all.

IMPLICATIONS FOR NURSING

Nurses are on the frontlines providing care to individuals, families, and communities in all settings, during endemic and pandemic times. This was evidenced by the many stories that aired on local and national news channels across the country during the initial weeks and months of the COVID-19 pandemic. As among the most highly regarded patient advocates, nurses need to ensure that patients' rights are respected and that transparent processes are in place at their health care institutions. This is essential in the event that if resources become scarce, patients and their families will be informed and understand the decisions behind these processes.

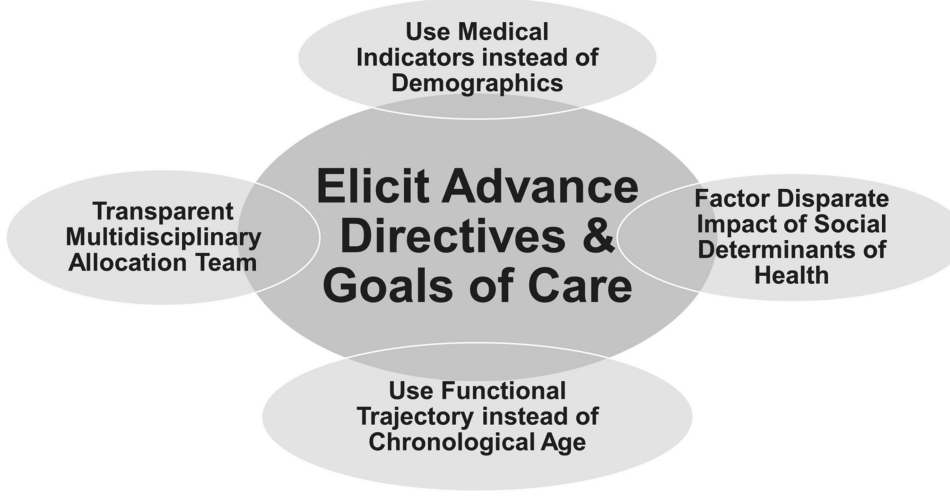

FIGURE. Resource Allocation Model.

Nurses are also in the position to help educate their colleagues across disciplines. This includes modeling effective communication with patients and families that does good and does not harm. The pandemic was, and still is, an uncertain time, but despite this uncertainty, nurses and other clinicians have a responsibility to reassure patients, families, and their community that the health care team will do everything that can be done to provide compassionate and equitable care for all.

CONCLUSION

Previous research identified using the ethical principles to guide resource allocation and reallocation decisions, but that may not be enough to protect the rights of older adults. Functionality, years of life versus number of lives saved, eliciting patient goals of care, and fostering trustworthiness in the public are all important factors involved with resource allocation decisions, including withholding medical care. Resource allocation decisions should include more than ethical principles alone in order to protect the rights of all patients and in particular vulnerable populations such as older adults.

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