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Review Article

# Outstanding ethico-legal-*fiqhi* issues ☆

**Omar Hasan K. Kasule, MB ChB (MUK), MPH (Harvard), DrPH (Harvard)**

*Department of Bioethics, King Fahad Medical City, Saudi Arabia*

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**KEYWORDS**

Do not resuscitate (DNR);
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Futility

**Abstract** *Objective:* To examine the practical issues arising in implementation of DNR from the perspectives of *maqasid al shari'at* and *qawa'id al shari'at*.

*Methods:* The purposes and principles of the Law provided a conceptual framework for analyzing practical issues related to DNR orders. The issues were identified from a Pubmed literature search with the key word 'DNR' covering about 30 years and were analyzed as they related to the principles of intention, certainty and preventing harm and also to the purposes of preserving life and resources.

*Results:* It is proposed that DNR orders be written for patients in an established death process, i.e. cardiorespiratory failure beyond Young's point '*z*'. Patients with terminal incurable conditions who develop acute, reversible cardiorespiratory arrest should be resuscitated if the net benefit will last for a reasonable time. Five components of DNR (cardiopulmonary resuscitation involving chest compression and oxygenation, endotracheal intubation, mechanical ventilation, defibrillation and vasoactive or ionotropic medication) could be provided on a case-by-case basis. The interventions may or may not include renal dialysis, blood transfusion, parenteral nutrition, pulmonary hygiene and normal treatment such as antibiotics. All patients, irrespective of their DNR status, deserve supportive care.

*Conclusion:* To improve DNR processes, training should be given on end-of-life ethical issues for physicians and nurses, DNR orders should specify interventions, the autonomy of physicians who have a conscientious objection to DNR should be respected, more psychosocial support should be given to the families of DNR patients, more empirical research is required on DNR, and DNR decisions should be audited regularly.



Address: Department of Bioethics, King Fahad Medical City, Saudi Arabia.

E-mail address: omarkasule@yahoo.com.

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## Introduction

The two main objectives of DNR orders are to respect patients' autonomy and to prevent unnecessary, non-beneficial interventions. These objectives are not well met in practice.[1] Confusion in discussions and decision-making about end-of-life issues arises from different perceptions of what the terms mean. Clarification of the terminology used and the underlying conceptual basis is needed. Most DNR policies provide procedural and technical guidelines[2,3] but do not explore the conceptual basis, leaving the physician at a loss when the situ-

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ation at hand does not fit the guidelines perfectly, as he or she has no conceptual or methodological basis for independent thinking. Algorithms can help physicians to make end-of-life intervention decisions quickly under pressure of time,[4] but no specific case will fit the algorithm exactly, so that physicians need basic principles that can be applied to all situations.

The aim of this paper is to provide a conceptual basis for analyzing ethical issues related to DNR based on the principles of Islamic Law. It is not based on original sources from the Qur'an and *sunnat*, nor does it refer to past or current legal opinions, *fatawa*, because its purpose is to give physicians simple axioms (*maqasid al shari'at* and *qawa'id al fiqh*) that will allow reasoning and understanding of complicated ethical issues. These axioms were derived inductively from original sources by jurists in the fifth century of *hijra*. Equipping physicians with *maqasid* and *qawa'id* tools for analyzing ethical issues will "teach them to fish instead of giving them a fish". The circumstances of each ethical case are unique, and no one legal opinion can cover all the nuances, thus leaving room for the physician's personal analysis and understanding. The final decisions in specific cases should be referred to the competent legal authorities in each jurisdiction. If the authorities present textual evidence, *nass*, there is no room for use of *ijtihad* based on *maqasid* and *qawa'id*, in conformity with the principle that there is no justification for *ijtihad* in the presence of textual evidence, *la masaagha li al ijtihad fi mawrid al nass* (Majallat Article No. 14).

## Materials and Methods

The purposes of the Law, *maqasid al shari'at*,[5] and the principles of the Law, *qawa'id al fiqh*,[6,7] provided a conceptual framework for analyzing practical issues related to DNR orders. The issues were identified from a Pubmed literature search with the keyword 'DNR' and covering a span of about 30 years of DNR experience. The issues were analyzed as they related to the principle of intention, *qa'idat al qasd*; the principle of certainty, *qa'idat al yaqiin*; and the principle of preventing harm, *qa'idat al dharar*. They were also analyzed as they relate to the purposes of preserving life, *hifdh al nafs*, and of preserving resources, *hifdh al mal*. The issues are summarized in Tables 1 and 2.

**Table 1:** Ethical issues in 'Do not resuscitate' (DNR) and *maqasid al shari'at*.

| Purpose | Ethical issues and practices |
|---|---|
| Protection of life, *hifdh al nafs* | Instituting beneficial artificial life support protects life |
| | Euthanasia in the form of a DNR order violates life |
| Protection of wealth, *hifdh al maal* | Instituting futile life support wastes resources |
| | Inappropriate ICU admission wastes resources |
| | Over-utilization of ICU resources for futile cases |
| | Resource conservation by palliative care |

ICU, intensive care unit.

## Results

### *Issues related to the principle of certainty,* ***qa'idat al yaqiin***

*Terminal illness*, *maradh al mawt*, defined as illness from which recovery is not expected, is also called the 'end of life' or 'approaching the end of life'. The period can vary from a few days to several months. The definition of terminal illness is based on empirical probability estimates reflecting experience with similar patients who succumbed to their disease. As terminal illness is a probability statement, it does not apply to all patients, as diagnosis and prognosis are not 100% infallible. There are anecdotal reports of terminally ill patients living a normal life for years, but these are the exception and reflect the fact that probability estimates by humans are not perfect because of limited knowledge and understanding of 'the seen', *'ilm al shahadat*, and complete ignorance of 'the unseen', '*ilm al ghaib*. The basic default position is that of the certainty, *yaqiin*, that illness is reversible. A diagnosis of terminal illness must be based on strong clinical evidence interpreted within previous institutional experience. This is in conformity with the principle of the Law that certainty cannot be voided by doubt or speculation, *al yaqiin la yazuulu bi al shakk* (Majallat Article No. 4).

*Death* and the moment of its occurrence are uncertain in this era of technology. Death is not an event but a process, with a time line that may be long or short. Theoretically, death starts at birth, because cells and tissues die and degenerate. During the period of growth and development until about 35 years of age, repair or regenerative processes dominate degenerative ones. After that time, degenerative processes increase, until regeneration and repair are overwhelmed and death can ensue without a specific pathology. This is the basis for the inevitability of death. Pathological insults to the body structure or functions hasten the degenerative processes and may hasten the process of death.

Degeneration affects all organs and functions of the body, but the final common pathway is cardiorespiratory failure, which impairs perfusion of the cells by oxygen and the nutrients necessary for metabolism. Brain tissue, being the most sensitive to oxygen and nutrient deprivation, will die first. There is, however, a chicken-and-egg argument here. If the brain dies first, the cardiorespiratory system will die soon afterwards, because its coordinated function requires that some brain centers remain active and alive. If the cardiorespiratory function dies first, the brain will not receive oxygen and nutrients and will die. Cardiorespiratory failure is progressive but hastens as death approaches. There is a point of irreversibility along this death time line, called Young's 'point *z*', which separates prolongation of life from prolongation of death. Beyond this point, an established death process occurs. All forms of life support, basic and advanced, used before this point have some benefit, albeit temporary; advanced life support beyond this point is futile. It is unfortunate that many patients who are beyond point *z* are treated in intensive instead of palliative care, because physicians are reluctant to decide to withhold or withdraw life support.[8] The definition of legal death is under the principle of custom, *qa'idat al 'aadat*. It is based on the existing consensus among physicians at that time and is considered usual custom; it is therefore legally binding, *al 'aadat muhakkamat* (Majallat Article No. 36). This implies that the definition