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Editorial- Educational

"Do Not Resuscitate" (DNR) Policies in the ICU – The Time Has Come for Openness and Change

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Cardiopulmonary resuscitation (CPR) is the emergency medical procedure used in an attempt to restart circulation and breathing in a patient after the heartbeat and/or breathing have ceased. The most basic form of CPR involves giving artificial breaths and external chest compressions while advanced CPR includes, in addition to basic CPR, placement of an advanced airway, giving electric shocks and medications[1].

History

The use of CPR started in the early 1960s in the United States, at which time it was used primarily for patients suffering from anesthesia-induced cardiac arrest. In the initial years, it seemed a miraculous therapy because of its simplicity and effectiveness; therefore, its use was made mandatory for all patients who suffered cardiopulmonary arrest[2]. However, it was soon realized that the routine use of CPR had its own problems. In many cases, it only restored the circulation transiently while prolonging the suffering of the patient. The agony suffered by terminally ill patients because of repeated resuscitation was increasingly being realized. Medical staff resorted to less than full resuscitation attempts; popular terminology among hospital staff for this practice was **"chemical code," "show code," "Hollywood code," or "slow code**"; therefore, ensuring that any resuscitation effort in these patients will fail, while still allowing the staff to tell the family that everything possible had been done to save the patient. This was a level of dishonesty that is considered unacceptable nowadays, as total truthfulness is a cornerstone of medical practice today. "Slow codes" should be outlawed in every hospital.

In the 1980s, a problem arose in New York, where it was discovered that doctors had been placing colored stickers on the charts of patients they did not want to resuscitate[3]. Then they remove the stickers after the patient had passed away, so that there was no subsequent evidence in the file of any "DNR" instruction. These practices were clearly underhand and unethical as they violated professional obligations to patients and their families.

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Because physicians and hospital administrators realized that some patients and their surrogates did not want CPR, a need for formal advanced decision-making about resuscitation of terminally sick patients became a necessity. In 1974, the American Medical Association became the first professional organization to recommend that the decision not to resuscitate be formally documented in progress notes and communicated to all attending staff[4]. Two years later, the Massachusetts General Hospital (MGH) and the Beth Israel Hospital in Boston publicly reported their policies regarding End-of-Life care for critically ill patients[5,6].

Definition of DNR

The definition of DNR is imprecise and is subject to interpretation. Broadly, it means not performing CPR. Do Not Resuscitate (DNR) orders have been abbreviated in many forms: Do Not Attempt Resuscitation (DNAR), Not for Resuscitation (NFR), Do Not Intubate (DNI) but eventually they all mean the same thing. Recently, the term "End-of-Life care" has gained popularity as it has a positive psychological resonance, emphasizing what will be done rather than what will not be done, and allowing for a decision not to ventilate or not to give inotropes before a cardiac arrest. As there is a negative prefix to DNR, it may not go well with the patients or their relatives who may conclude that the health care providers are not doing anything or giving up without trying. There is also a wide variation in doctors' and nurses' views regarding DNR orders. While some may understand it as giving only "comfort" care (withdrawal of active care), others may interpret it as being "less aggressive" care (withholding of active care)[7].

We interpret a DNR order as not performing the physical and pharmacological components of Advanced Cardiac Life Support (ACLS) after a cardiopulmonary arrest; a DNR order should not be confused with withdrawal of or withholding treatment prior to a cardio-respiratory arrest[8]. DNR means that every appropriate treatment shall be done for the patient up to, but not including, CPR. Clearly a patient should never be subjected to inappropriate treatment, for example, treatment considered by the medical team to be futile. Such futile treatment causes unnecessary suffering for the patient, gives unrealistic hope to the family, is demoralizing for staff who must administer it and is wasteful of resources.

Role of Doctors

All our patients will eventually die, so if we look at the practice of medicine as simply prolonging life, then we are doomed to be professional failures. The role of doctors is to maximize the quality of life and to maximize life-span but not to prolong life when all reasonable quality of life has been lost. Almost all medical jurisdictions internationally now accept this concept[9,10].

End-of-Life care must strive to address the physical, psychological, social, and spiritual needs of patients and their families, considering their personal, cultural and religious

values, goals, beliefs and practices. The physical needs of a dying patient include hydration, feeding, nursing care, pain relief and all other procedures that improve the patient's comfort. It is not in the patient's interest, nor it is ethical practice to subject a patient to procedures that have no value. Our training tells us that we must do what is best for the patient. If we subject a patient to procedures that our knowledge and training tell us is futile and may even increase the suffering of the patient, then we are going against the principles of our profession. In many countries, we would be subject to disciplinary action by the local regulatory body for increasing a patient's suffering by subjecting him to inappropriate or futile procedures.

Patient's Age and DNR

Old age alone should never be a reason for DNR. However, if age means that a number of diseases such as diabetes mellitus and arteriosclerosis are long-standing and have the complications that come with time, then age must be regarded as a co-existing factor.

Family Involvement

As we are writing about "DNR" in the intensive care unit, communication should be with the patient's family, rather than with the patient himself, who is always too ill to communicate his wishes to us.

Family involvement should be encouraged in all end-of-Life and DNR decisions. However, families should not be allowed to take control of the patient's medical management. The medical team has the knowledge, training and experience to make the best medical decision. The family should be informed of all major medical decisions during the course of illness; communication should be optimal throughout, but in the end the medical team must make the medical decisions. It is not sensible to allow a relative who may be an accountant, engineer or shopkeeper to decide on the medical management of a patient. The rights of the patient must always come before the rights of the family, and the doctors must always do what is right and best for the patient. Clearly, however, families must be dealt with in a sympathetic manner and with good communication on a regular basis.

When we are dealing with terminally ill children, the situation is more complicated. Parents must be involved in all decisions, and DNR should only be discussed at a late stage when certain amount of trust has developed between the doctor and the family. Parents need a lot of time to come around to the realization that their child is not going to survive and that their child should be allowed to die in peace and comfort. The explanation of DNR decision is an extended process over a number of meetings with parents, rather than a single conversation.

Religion and DNR

As far as we understand, DNR order is not contrary to the beliefs of any of the major world religions.

The DNR debate has been addressed by Islamic scholars. Kasule wrote that DNR order is permissible in Islam in cases of a high degree of certainty that resuscitation is futile and will not result in net and lasting benefit to the patient[11]. This seems sensible, although disappointingly Kasule goes on to state, in what appears to be a personal view, that DNR decisions must receive informed consent from the family because "only the patient and close relatives have the patient's best interests at heart". In this opinion, Kasule's thinking is flawed on three levels. First, because the family's decision to give or withhold consent would be based on emotion rather than science. Second, to say that only the family has the patient's best interests at heart is incorrect and suggests a poor opinion of the medical profession – every doctor should have the patient's best interests at heart at all times. Third, it is the doctor, not the family, who has the training, knowledge and experience of critical care situations. To decide to hand over medical decision-making to an already distressed family with little understanding of the medical technicalities appears to make no sense whatsoever.

The Islamic religion's views concerning a DNR decision have been clarified in a Fatwa from the Presidency of the Administration of Islamic Research and Ifta in Saudi Arabia[12]. The Fatwa states that:

"*If three knowledgeable and trustworthy physicians agree that the patient condition is hopeless; the life-supporting machines can be withheld or withdrawn. The family members' opinion is not included in decision-making as they are unqualified to make such decision.*"

This opinion goes as far as to permit withdrawal of treatment, something with which many doctors who are in favor of End-of-Life care will find disagreeable. We feel that withdrawal is a step too far; it is better to practice non-escalation of care than to actively withdraw life-support such as ventilation on which the patient may have become dependent.

Hospitals without a DNR Policy

There are some hospitals in the Middle East that have decided not to have a DNR policy, probably because they have been indecisive about the legality of DNR orders in their particular country. However, even in these hospitals, a decision is eventually made in futile CPR situations not to continue – eventually the CPR is called off after a number of CPR cycles. The decision to stop CPR is a clear application of a DNR decision. However, in these hospitals, in the absence of a formal DNR policy, DNR decisions are frequently made in an unregulated manner outside normal working hours by unsupervised on-call junior staff who do not know the patient. Thus, these hospitals are a great source of worry about ethical and professional standards than hospitals that have a DNR policy. It is ethically and professionally more acceptable to have a DNR decision made in a transparent, non-urgent manner, in accordance with a known written policy, and recorded in the patient's file by several senior clinicians who are familiar with the patient.

The Future

As the term DNR refers to CPR after a patient has suffered a cardio-pulmonary arrest, it is time to look also at the period of time leading up to a cardiac arrest. DNR policies should be renamed “End-of-Life care policies” to recognize a situation of irreversible illness where appropriate care should consist of nursing, physiotherapy, occupational therapy, fluids, feeding, pain relief and all “ordinary” medications. Extraordinary medications and procedures, such as the inotropes and vasopressors used in ACLS protocols, intubation, ventilation and continuous renal replacement therapy should not be used in a patient who has come to the end of his natural life. End-of-Life care, like DNR, should be managed and controlled in an open manner with a clear policy outlining the conditions surrounding its use. A number of doctors should be involved in an End-of-Life decision, and the family should be consulted and informed. Another term “Allow natural death” is being used more frequently, but in our view this term sounds somewhat passive, and does not emphasize the continuation of active patient care as much as the term “End-of Life care” [13]. We, therefore, recommend that the term “End-of-Life care” be applied in the future, and that every hospital should have a clear “End-of-Life care” policy. This policy should confirm the definition of what the terms “CPR” and “End-of-Life care” mean, and then include strict guidelines as to how “End-of-Life care” should be applied in the hospital.

Key aspects of a hospital “End-of-Life care” policy should include:

- **A clear definition of both CPR and “End-of-Life care”.**
- **A statement that “End-of-Life care” would only be implemented where future management of the patient up to and including CPR would be considered to be futile by the team.**
- **A statement on the legality and religious acceptance of the DNR concept.**
- **The need for total honesty with the patient and his family, with clearly defined channels of communication.**
- **The need to fully inform the family of the decision.**
- **The need to ban the concept of a “soft code”.**
- **A reference should be made to special considerations in the case of children with irreversible terminal illness.**
- **There should be an emphasis that an “End-of-Life care” decision is a medical one, not a family decision.**
- **There should be a ruling on how many doctors should sign the “End-of-Life care” form, what rank they should be, and what specialties they should be from.**
- **The duration of an “End-of-Life care” instruction and the need to review it after certain time intervals.**
- **Where the family finds it difficult to accept the medical team’s “End-of-Life care” decision, a mechanism should be available for dealing with the disagreement. For example, the family should be allowed to bring in an outside doctor of their choice, and if there is still disagreement, referral to a hospital’s ethical practice committee should take place.**

REFERENCES

1. Cantor MD, Braddock CH, Derse AR, et al. Do-Not-Resuscitate Orders and Medical Futility. Arch Intern Med 2003; 163(22):2689-94.
2. Burns JP, Edwards J, Johnson J, et al. Do-Not-Resuscitate Order after 25 Years. Crit Care Med 2003; 31(5):1543-50.
3. Luce JM, White DB. A History of Ethics and Law in the Intensive Care Unit. Crit Care Clin 2009; 25(1):221-37.
4. American Heart Association. Standards for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care (ECC). V. Medicolegal Considerations and Recommendations. JAMA 1974; 227(7): Suppl: 864-8.
5. Rabkin MT, Gillerman G, Rice NR. Orders Not To Resuscitate. N Engl J Med 1976; 295(7):364-6.
6. Pontoppidan H, Abbott WM, Brewster DC, et al. Optimum Care for Hopelessly Ill Patients — A Report of the Clinical Care Committee of the Massachusetts General Hospital. N Engl J Med 1976; 295(7):362-4.
7. Mamat M. Do Not Resuscitate: Are We Clear About It? MSA Year Book 2010: 56-61.
8. Field JM, Hazinski MF, Sayre MR, et al. Part 1: Executive Summary: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation 2010; 122(18 Suppl 3):S640-56.
9. Danis M, Devita M, Armstrong C, et al. Consensus Statement of the Society of Critical Care Medicine's Ethics Committee Regarding Futile and other Possibly Inadvisable Treatments. Crit Care Med 1997; 25(5):887-91.
10. Carlet J, Thijs LG, Antonelli M, et al. Challenges in end-of-life care in the ICU. Statement of the 5th International Consensus Conference in Critical Care: Brussels, Belgium, April 2003. Intensive Care Med 2004; 30(5):770-84.
11. Kasule OH. DNR: An Islamic formulation. JIMA 2010; 42(1): 36 –7.
12. Administration of Islamic Research and Ifta, Riyadh, KSA, in their Fatwa No. 12086 issued on 30.6.1409(Hijra) [1988 (AD)].
13. Venneman SS, Narnor-Harris P, Perish M, et al. “Allow Natural Death” Versus “Do Not Resuscitate”: Three Words that can Change a Life. J Med Ethics 2008; 34(1):2-6.