

Do not resuscitate (DNR) and do not attempt resuscitation (DNAR): What? When? How?

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How to cite the article: Kakati SD, Ninu M. Do not resuscitate (DNR) and do not attempt resuscitate (DNAR); What? When? How? *OncoCritiCare*2023;1:60-65.

“Dying can be a peaceful event or a great agony when it is inappropriately sustained by life support.” - Roger

Death is an inevitable event in a person's life and it can be painful. A large number of patients die in the hospital or intensive care unit (ICU). One in five Americans and 50% of hospitalized patients die in intensive care.¹ In India, around 10–36% of patients admitted to the ICU perish.² But death doesn't have to be painful always. By adhering to principles of good death and end-of-life care, a person should be able to embrace death in a dignified manner peacefully, symptom-free, with spiritual and emotional needs met, surrounded by loved ones and away from ICU for long periods with artificial support.³ The six components of care for good death includes pain and symptom management, clear decision-making, preparation for death, spirituality and meaningfulness at the end of life, contributing to others, and affirmation of the whole person.⁴

Doctors by virtue of their profession as a caregiver tend to resuscitate a dying person even after recognizing the poor outcome. Several factors like fear of litigation, social and religious beliefs, lack of legal end-of-life policy often necessitate their action, but in doing so, it not only prolongs the patient's suffering and cause waste of resources but also gives them a poor quality of life.

Cardiopulmonary resuscitation (CPR)

CPR was introduced around 1960 to restore the heart after it has stopped. It is an emergency medical procedure that combines chest compression often with artificial ventilation. CPR consists of giving chest compressions, electric shocks, mechanical ventilation, putting invasive airways and injecting drugs into the body. However, it was found that CPR is not as effective if given in patients with serious long-term conditions like chronic heart,

lung and kidney failure and irreversible end stage disease like malignancy. The survival rates of CPR in 70 years and older following in-hospital cardiac arrest (IHCA) and out-of-hospital cardiac arrest (OHCA) were found to be 28.5% and 11.1%, respectively.⁵ CPR can cause rib fractures, liver and spleen injury and brain damage. Post CPR care requires further advanced ventilatory and organ support. One third of survivors may have residual damage to the brain, psychosocial stress disorders and chronic weakness.

The World Health Organization (WHO) reported in 2014 that 68% of deaths worldwide were caused by chronic non-communicable diseases and sadly, India constituted 15 per cent of this global burden.⁶ Despite this high death rate, India still lacks the end-of-life care (EOLC) policy with only a small proportion of terminally ill patients in ICU receiving it.⁷ India was ranked in the last position out of 40 countries in end of life care.⁸ In fact, 80% of the intensive care physicians in India support the continuation of life-supporting interventions in critical care and only 55% practiced 'Do Not Resuscitate' (DNR) orders correctly and unilaterally.⁹ They are afraid of being misunderstood by the families of patients and the unethical use of the life-support limiting approach. In Indian ICU, withholding and withdrawal of life-supporting interventions (WOLS) was implemented before deaths in only 22% in one centre in New Delhi and in 19%, 40%, and 50%, respectively in three centres of Mumbai.¹⁰

In contrast, in US and Europe, withholding or withdrawal was implemented before deaths in up to 90% of dying patients in critical care units and in 10% during admissions.¹¹ Due to nonavailability of a proper EOLC and financial burden, 79% of patients leave the hospital against medical advice termed as left against medical advice (LAMA).

Although there have been some legal reforms in EOLC in the past few years, there is still uncertainty among physicians regarding patient selection, communication and moral obligation.

Hence, there is a need to establish the awareness of the Do Not Attempt Resuscitation (DNAR) concept in the end-of-life care process among the general public and health care workers. Together with the governing bodies, institutions can lay the foundation of their own end-of-life care policy so that every patient can die with dignity.

Limiting life supports

Life sustaining supports can be withheld from an actively dying person in whom CPR is unlikely to be successful due to the underlying disease process or in cases where it is expected that the patients will suffer unnecessarily after resuscitation due to poor quality of life. Sometimes the decision is made in advance by the patient or his families in accordance with the hospital staff.

Patients are defined as 'approaching the end of life' when they are likely to die within the next 12 months.¹² This encompasses a whole range of patients including those with imminent death expected within a few hours or days and those with advanced, progressive, incurable conditions, general frailty and co-existing conditions leading to death within 12 months.

In these situations, CPR is thought to be ineffective, and thus, the DNR order was introduced by American Heart Association in 1974 and the first hospital policies on DNR orders were written in 1976.¹³ Do not attempt resuscitation is a decision not to initiate or perform CPR on the background of terminal illness in accordance with the prior expressed wishes of the patient or surrogate.¹⁴

"Do Not Resuscitate (DNR) or Do Not Attempt Resuscitation (DNAR)", is a written document made either in the hospital or on a legal form, directing the health care team to withhold CPR or advanced cardiac life support, in case their patient's heart or lungs stop functioning. DNAR orders can be instituted for any patient's wishes, who are at risk of cardiopulmonary arrest, regardless of the age or state of illness. DNAR orders can be valid in any health care setting, in or out of hospital, within the domain of legal laws. It talks about withholding CPR and but not about other forms of treatment like withholding life support like ventilation or discontinuing inotropes, routine care like oxygen, nutrition or fluids. In case of doubt, CPR should be performed.¹⁵ It should be treated like any other treatment decision that must be documented properly and communicated to all team

members for an effective implementation whenever required.

DNR should not be activated in situations where the outcome is doubtful, there is difference in opinion among family members, the person directly responsible to the patient is not present and written consent is unavailable

Developed countries like USA have a clear view of DNAR due to the Patient Self Determination Act (1990) which pays respect to patient's autonomy. In the UK 22% of patients were issued 'not for resuscitation' order at the time of emergency call or afterwards, whereas in Australia 23% of all medical emergency calls were given 'not for resuscitation' order and 3.8% were issued the order at the time of attending the emergencies.¹⁶ So far, the concept of DNR is not clear in India.¹⁷ Patients are usually dependant on their families or their financial provider. On the other hand, 80% of the health care bills are paid by the patient and less than 20% rests on the public health care, which is already overwhelmed with bed shortages and lack of infrastructure.¹⁸

Barriers of implanting DNAR orders

Some of the barriers of implementing DNAR orders include choosing an unsuitable patient, failure to recognise the dying person, insufficient understanding of disease and symptom management, limited knowledge of palliative and end-of-life care among doctors and staff, lack of hospital support system and end-of-life care policies.

Deficient communication skills, cultural and language barriers, shortage of time, and the human desire to maintain hope put a hindrance in implementation of DNAR.

Legal issues arise due to the lack of advanced directives, confusion in choosing the surrogate decision makers, unavailability of legal experts in institutions, inconsistent policies and documentation of palliative and end-of-life care in national healthcare policy.¹⁹

Decision Making

Four ethical principles must be followed while taking decisions on end-of-life care.^{20,21}

1. Autonomy of the patient
2. Beneficence
3. non-maleficence
4. Distributive justice

Among these, respect for patient's autonomy is the most important.

End of life care (EOLC)

The Indian Council of Medical Research (ICMR) defines end of life care as a “an approach to a terminally ill patient that shifts the focus of care to symptom control, comfort, dignity, quality of life and quality of dying rather than treatments aimed at cure or prolongation of life.”¹⁴ The objective of end-of-life care is attainment of a good death for any person who is dying, irrespective of the situation, place, diagnosis, duration of illness, quality-of-life and quality of death. EOLC is a human right and every person has a right to a good, peaceful, and dignified death.²³

Palliative Care

Patients should not be sent to the palliative care providers in the last stage. Palliation is not only for dying patients but also for those with chronic intractable symptoms like severe pain, respiratory distress etc. Hence, it is important to consider a slow continuous transition of care from cure to palliative as suggested by WHO. Palliation should be initiated early, often at the time of diagnosis as it not only supports the patient and family during EOL phase and dying process but also after the death and bereavement.

End of life process

The patient’s physical signs and symptoms, mental wellbeing and communication needs are first assessed. Communication, consensus, consent, access to essential medication and symptom control should be done. There must be a dedicated space with round the clock staff where the needs of the patient and family is looked after. Adequate control of pain and other symptoms, through ongoing assessment and reassessment is an important aspect. Any problems should be documented, treated and reviewed. Once the decision has been taken to initiate EOLC, consensus should be achieved among all the caregivers, physicians and palliative care physicians.²⁴

Medical futility: According to the American Thoracic Society (ATS) “A life-sustaining intervention is said to be futile if reasoning and experience indicate that the intervention would be highly unlikely to result in a meaningful survival for that patient”. Futility may be quantitative (how low are the odds of success) or qualitative (what are the desired ends). There is no consensus among physicians about the exact definition of futility. More often than not, the issue becomes contentious.²⁵

In case of confusion regarding futility, following steps can be taken. 1. A second opinion from another physician not directly involved in the care of the patient. 2. Multiple

counselling sessions with the family. 3. If the family doesn’t agree, issue can be referred or transferred to another treating team willing to continue supports. 4. Hospital administration can set up a committee to counsel and resolve the matter.²³ The committee may take the help of a social worker, psychologist or priest to help dissolve the conflicts. Local society factors, cultural and social beliefs should also be considered.²⁶

Consent

Before taking an informed consent, the mental competence of the patient for taking an informed decision should be assessed. He should be able to understand, appreciate, give reasoning and express his choices. In England the Human Rights Act 1998 and the Mental Capacity Act 2005 provide the legal basis for DNACPR decision-making.

Identification of surrogate

If a patient is found to be mentally incapacitated to give valid informed consent, a surrogate decision-maker should be identified. Surrogate is a person or persons other than the health-care providers who is/are accepted as the representatives of the patient's best interests, who will make decisions on behalf of the patient when the patient loses decision-making capacity. Surrogate can be any nominated person, the family, carers, any holder of a power of attorney or anyone appointed by court. The decision-maker must take into account the patient’s past and present wishes, feelings, beliefs and values or take help of advanced directives. When no surrogate is identified and a patient has no written advance directive, a court appointed guardian or the hospital ethics committees can assist with decisions.²⁷

Advanced Directives:

Advanced Directives is a statement made by a person with decision-making capacity stating his/her wishes regarding how to be treated or not treated at a stage when he/she loses such capacity. Very rarely, physicians discuss advanced directives even with their seriously ill patients. A person expresses his thoughts, wishes, and preferences for the last days of his life in the Advanced Directives and it is based on conversations, written orders, and living will or a competent patients can appoint a family member or friend as a surrogate decision maker and grant them the power of attorney, who will act on his wishes.

Communications

Communication is a vital aspect of DNAR situations. Adequate opportunity, time and space should be given to

discuss with the patient and family in private about DNAR and its implications. The physician should convey as accurate a prognosis as possible, specifying that uncertainty is inherent in the treatment of critical illness, in a language and terms that the family can understand. He should disclose the diagnosis, prognosis, range of therapeutic interventions available as well as the option of no therapy, including their risks, benefits, futility, costs and consequences thoroughly.

Life limiting interventions

When the fully informed capable patient/family chooses to opt for the overall treatment goal of “comfort care only” option, the physician should explicitly communicate the standard modalities of limiting life prolonging interventions. These include: (1) Do not resuscitate (DNR)/ Do Not Intubate (DNI); (2) withholding of life support or non-escalation (3) withdrawal of life support. 4) Euthanasia 5) Physician - assisted suicide

Withdrawal of life support: the cessation and removal of an ongoing medical therapy with the explicit intent not to substitute an equivalent alternative treatment. It is fully anticipated that the patient will die following the change in therapy primarily because of the underlying disease conditions.

Withholding of life support: the considered decision not to institute new treatment or escalate existing life support modalities (intubation, inotropes, vasopressors, mechanical ventilation, dialysis, antibiotics, intravenous fluids, enteral or parenteral nutrition) with the understanding that the patient will probably die from the underlying condition.¹⁴

End of life care should not be confused with euthanasia or physician-assisted suicide.

Euthanasia is the intentional act of killing a terminally ill patient on voluntary request, by the direct intervention of a doctor for the benefit of the patient.

Physician-assisted suicide is an intentional act of providing the means or methods to aid a dying person with terminal illness wanting to end his/her life. Euthanasia is permitted in Netherlands under certain strict regulations. Physician-assisted suicide (PAS) is legal only in the state of Oregon in the US. In India, the Supreme Court does not recognize that a terminally ill patient has the right to choose the manner of his death and forbids the use of euthanasia and physician-assisted suicide. The Supreme Court however, gave legal recognition to withholding and withdrawing life-sustaining treatment with strict guidelines in the Aruna Shanbaug’s case in 2011.²⁹ In 2018, Supreme Court made the EOLC refusal of life-sustaining treatment as a part of the fundamental right

to liberty and dignity. The court also recognized the legal validity of advance directives.³⁰

However, a number of roadblocks arose involving multiple rounds of approval by multiple authorities.³¹ The ICMR clarified the confusion that was created by the use of the phrase ‘passive euthanasia’ in the supreme court verdict of 2018. It says “euthanasia cannot be passive and withholding or withdrawing a potentially inappropriate treatment in a patient dying with a terminal illness that only prolongs the dying process, cannot be construed as an intention to kill’.³²

Ongoing supportive care till death:

This includes: (i) daily assessment of the patient for holistic palliative needs, psychological, spiritual along with symptom management at the end of life such as pain, breathlessness, delirium, vomiting (ii) daily supportive care plans and treatments and any change in plan should be documented for all in-hospital EOLC. (iii) if the patient is not already on any life-sustaining support, patient/surrogate decision-makers may be given an option for home-based/hospice-based care.

Review of DNR orders:

Every DNR orders, even where it seems final, should be reviewed at predefined intervals and continuation of DNR orders should be documented in the patient case records. The senior most consultant or a person working on his behalf should do this. In the DNR, the reasons should be documented and informed to the relatives, preferably the same person who were present at initial discussion. If a patient is being transferred to another facility, DNR orders remains valid and relatives should be aware of this.

Documentation:

At the end, the checklist for communication should be filled by communicating team’s clinicians. A mentally capable patient’s wishes for withholding life support measures should be recorded and signed. If patient is incapacitated, a consensus amongst all family members is established, followed by documentation of further potentially non-beneficial or harmful treatment and withdrawal or withholding of life supporting measures.

Storage of DNR/DNAR form:¹⁵

The resuscitation plans and completed DNR/DNAR forms should be easily accessible to all the medical professionals for appropriate response. A copy of the form should be attached to the patient’s case records and integrated with the

electronic medical record system. Case reports and the DNR/DNAR forms should be archived for future reference.

Legal tangle:

In India, legal guidelines and provisions clarifying moral or ethical dilemmas around EOLC do not exist at present. Much debate has centred on the issues of euthanasia, suicide, and right to life.

The Law Commission of India in their 196th report clearly separated euthanasia from EOLD. The Court ruled that withholding or withdrawal of life support was not illegal, and should be allowed in certain circumstances. A court procedure was recommended for all EOLD on incapacitated patients that would be practically impossible to implement in emergency and critical care situations. This would be applicable only for chronic vegetative states where life support institution or withdrawal was not in question. The limits of futility will also change with the available facilities and with the evolution of medical science.

Article 21 of the Indian Constitution states that “no person shall be deprived of his life or personal liberty except according to procedure established by law.” The court ruled that this cannot be interpreted as a right to take one’s life.

Section 81, IPC “Act likely to cause harm, but done without criminal intent, and to prevent other harm:”
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Section 88, IPC “Act not intended to cause death, done by consent in good faith for person’s benefit:”
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Section 89, IPC “Act done in good faith without guardian’s consent”

Section 92, IPC 92 “Act done in good faith for benefit of a person without consent.”
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Section 93, IPC “No communication made in good faith is an offence by reason of any harm to the person to whom it is made, if it is made for the benefit of that person.”

The Consumer Protection Act (1986) states that the physician is not guilty of negligence “if he has acted in accordance with the practice accepted as proper by a reasonable body of medical men skilled in that particular art.” As long as the doctor acts in a manner acceptable to the medical profession and treats the patient with care and skill, he will not be guilty of negligence even if the patient dies or suffers a permanent ailment. For decisions regarding deficiency of service amounting to professional negligence, courts have relied on expert opinion to decide whether or not the physician has acted in conformity with standard practices in the profession.

Conclusion

EOLC is a fundamental right of every citizen as every person deserves to die in peace and dignity irrespective of age, caste, religion and economic status. A good EOLC primarily needs a good team of dedicated healthcare providers trained in palliative and EOL. A comprehensive hospital policy is needed with a dedicated units in the hospital for EOLC provision, support from social workers, psychologist and educational activities in creating an awareness for the EOLC for everyone in this society. Medical and legal bodies, the government and local should also help in formulation and implementation of a uniform EOLC policy in our country.

Conflict of interest: Nil

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