

Anna Nowarska

Department of International Cooperation, Ministry of Health, Warsaw, Poland

CPR vs. DNR in the context of palliative care

Abstract

Medical advances have significantly improved the chances of survival for many patients with life-threatening illnesses. Simultaneously, complex ethical dilemmas have arisen. While limiting and/or forgoing a particular treatment in some situations at the end of life is now commonly accepted, many patients still die after heroic, extraordinary means were applied to postpone their inevitable death. This paper considers some of the issues surrounding the use of cardiopulmonary resuscitation and arranging "do not resuscitate" orders for palliative care patients.

Key words: cardiopulmonary resuscitation (CPR), "do not resuscitate" order (DNR), "do not attempt resuscitation" order (DNAR), "allow natural death" (AND), palliative care

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Introduction

The aim of this article is to present the issue of cardiopulmonary resuscitation (CPR) and "do not resuscitate" (DNR) orders [known also as "do not attempt resuscitation" (DNAR) or "allow natural death" (AND) orders] in respect of palliative care patients. Firstly, for the sake of clarity, the basic ideas are defined. Then, the article approaches the general problem of the place of CPR in the case of patients at the end of life. This is followed by the arguments in favour of both CPR and DNR orders in palliative care. Finally, a difficult problem regarding the decision-making process in a given area is discussed.

Cardiopulmonary resuscitation (CPR)

CPR, first introduced in 1960 [1], has revolutionized medicine by giving the hope of restoring life to many patients. It covers invasive interventions and includes chest compressions, electric shock by an external or implanted defibrillator, the injection of

drugs, and ventilation. In short, if someone suffers a cardiac or respiratory arrest, CPR may be attempted in order to restart his or her heart or breathing and restore circulation [2].

DNR, DNAR and AND

"Do not resuscitate" (DNR) order

Initially, it was agreed that CPR should be practised universally [3]. It was, however, soon noticed that such an approach was not always the correct one. In particular, many doubts have been raised with regard to terminally ill patients. Thus, the use of CPR in every case has been called into question [4, 5].

As a result, 'not for CPR' (i.e. "do not resuscitate") orders were introduced. Such an order was used by physicians in patients' notes to inform others that in their particular case CPR should not be attempted. There were many symbols indicating these orders, e.g. red hearts, stars near the patient's name, the "not for 222" order in the United Kingdom (UK) (as 222 was the telephone number for the resuscita-

Address for correspondence: Anna Nowarska

Departament Współpracy Międzynarodowej, Ministerstwo Zdrowia
ul. Miodowa 15, 00–952 Warszawa

e-mail: anna@nowarska.pl

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tion team in many hospitals) or the “no code” used in the United States (USA) [6]. However, there was no common policy in respect of establishing a category of patients with DNR orders.

The need for guidelines occurred in the UK in 1990 after a complaint from the son of an elderly woman who had had a DNR order placed in her medical notes without any consultation. As a result, the Chief Medical Officer decided to send a letter to consultants in all specialties asking them to ensure that they had policies regarding CPR orders [7]. After some time the policies were introduced more widely. It was agreed that CPR should only be performed on patients who were “likely to derive benefit from this intervention” [8].

Importantly, in the context of evidence that DNR orders are sometimes mistakenly understood as directives to also forgo treatments other than resuscitation [9], it must be emphasized that the order is an instruction to forgo resuscitation only. It does not mean the abandonment of care and should not affect any other necessary treatment [10].

“Do not attempt resuscitation” (DNAR) order

Some people have found the name of the DNR order very misleading. That is why there was a clarifying change from a DNR order to a “do not attempt resuscitation” (DNAR) order. It was argued that the former term on the one hand implied the omission of CPR and on the other allowed patients or their families to have the hope that an attempt at CPR would be successful. The alteration of the name was necessary to dispel some of the reasons for confusion in relation to the said CPR over-expectations.

Interestingly enough, even recent studies have shown that misinformation and unrealistically high expectations of the success rate of CPR interventions are still common, both among healthcare professionals [11] and patients and their families [12]. As far as the latter group is concerned, these are caused partly by the successful resuscitation actions often presented on television [13]. Generally, however, and this needs to be remembered, the chances of successful resuscitation are very low. Additionally, the serious burdens and risks of CPR must be taken into account when considering whether to start or forgo the intervention.

“Allow natural death” (AND) order

It is also argued that even DNAR orders may be perceived by patients and those close to them as having negative connotations, namely that a patient is deprived of some necessary treatment. Patients and

their families may be confused and fear that making a “do not resuscitate” decision is similar to agreeing to terminate one’s life [14].

As a solution, an alternative name for a DNR/DNAR order has been suggested. The main goal was to make the words less threatening and more descriptive. The proposed term was the “allow natural death” (AND) order [14, 15]. An AND order focuses rather on what would be done for a patient instead of concentrating on what would not be done. An AND order is clear and indicates that no heroic or extraordinary means should be applied. On the contrary, all that is possible should be done in order to allow a patient to die peacefully, comfortably and naturally. This approach fully aligns with the basic aims of palliative care [16, 17].

It seems that a simple change in the name of an order may contribute significantly to its wider acceptance and approval, mainly among patients and their relatives.

CPR and DNR in palliative care

Is there a place for CPR in palliative care?

At first glance palliative care and CPR may be seen as mutually exclusive propositions. They basically serve very different goals and are connected with rather opposing expectations. While the intention of CPR is to stop the process of dying and restore life, palliative care’s aim is neither to hasten nor postpone death, but to accept it as a natural end of life. Simultaneously, the latter strives to ensure the best quality of life and a peaceful and comfortable death.

CPR for palliative care patients is sometimes perceived as “an affront to the patient’s dignity”, “the antithesis of the peaceful, dignified death” [18] or causing “damage [to] the aim of a dignified death” [11]. It has been demonstrated that offering the opportunity of CPR to palliative care patients may be seen as a confusing double message: on the one hand palliating and on the other offering an active treatment [11].

The evidence that CPR in general, but particularly in the context of palliative care, is likely to be futile may also contribute to a denial of the validity of CPR interventions in palliative care. It has been estimated that in palliative care units the predicted CPR success rate in many patients would appear to be less than 1% [11]. The results of another study show that for those who were expected to have cardiac or respiratory arrest and were at the end of life, there was 0% of CPR success [19].

The arguments for CPR in palliative care

The changing nature of palliative care

Despite the doubts presented above, there are valid arguments in favour of CPR in some end-of-life situations. It may reasonably be claimed that a blanket “no” for DNR orders is not appropriate.

As palliative care reflects advances in current medical knowledge, its role has been redefined and expanded accordingly. Now it focuses not only on patients at the very end of life, it also deals with patients facing the problems associated with life-threatening illnesses at an earlier stage (sometimes even before secondary spread has occurred) and with non-malignant diseases. For some of these patients CPR may be suitable and even indicated [11].

Additionally, as there is a tendency for the more frequent use of anaesthetic techniques in palliative care, a need for CPR increases. The case of a patient receiving successful resuscitation after having a cardiac arrest during an anaesthetic procedure is described by Noble and colleagues [20]. In a given example, CPR allowed a patient to settle her affairs and say goodbye to her family.

It is rightfully argued that palliative care should not be exempted from offering CPR in certain situations, even though palliative care professionals may provide only basic life support (with the possibility of calling for or transferring a patient to the appropriate emergency services) [21].

Patient autonomy

There are also calls to consider CPR in palliative care with respect to patient autonomy. This point of view may be seen as desirable as it acknowledges the value of an individual’s life and patients’ choices, wishes and preferences [18]. However, while the principle of autonomy gives a patient the right to refuse treatment, it does not imply simply the right to request it. As a result, patients cannot demand CPR in every circumstance and physicians are not obliged to provide treatment that is unlikely to benefit the patient.

In other words, healthcare professionals are exempted from a duty to provide CPR when there is clear evidence that the treatment would be futile [2, 22, 23]. They need to consider the therapeutic efficacy of CPR, as well as the associated risks and burdens. Indeed, physicians should also address the patient’s preferences and give weight to them [24]. However, the principle of autonomy must be balanced with other ethical principles, such as beneficence, nonmaleficence and justice, and cannot have a supreme status.

The arguments for DNR in palliative care

It can reasonably be claimed that for the majority of palliative care patients CPR would be an intervention that is not indicated. Therefore, a DNR decision should be made in order to prevent patients from the very possible harm caused by inappropriate or undesirable CPR attempts.

On the one hand, the harm may occur as a result of factors associated with a physician: his discomfort over a patient’s approaching death, denial of the inevitability of death, or his misunderstanding of a duty to do everything achievable at that particular moment. On the other, there are various factors connected with the patients; they may demand from medical staff everything that is possible to be done in respect of planned treatments, deny their terminal condition or have overly optimistic expectations of the abilities of medicine [16].

In such a context, it is important to emphasize that initiating a CPR attempt for a patient with evidence that the treatment will be futile has a number of serious implications both for patients and healthcare professionals. Patients may receive an unsuitable intervention which may lead to complications, such as brain damage due to hypoxia and other consequences such as increased physical disability. This may cause that patient’s death to be undignified and distressing. Healthcare professionals who participate in what they believe to be inappropriate CPR may experience a range of negative emotions, such as anguish, anger and powerlessness [18].

As has been suggested in the guidelines issued by the UK’s General Medical Council, “if cardiac or respiratory arrest is an expected part of the dying process and CPR will not be successful, making and recording an advance decision not to attempt CPR will help to ensure that the patient dies in a dignified and peaceful manner. It may also help to ensure that the patient’s last hours or days are spent in their preferred place of care by, for example, avoiding emergency admission from a community setting to hospital” [2].

Decisions in respect of DNR orders

The decision-making process

After discussing the basic issues connected with the nature of a DNR order, the problem of the decision-making process must be addressed. There are questions of paramount importance: who makes the decision to forgo CPR? Should the patient and his family be involved and to what extent? It appears that medical professionals, patients and

their relatives vary in their willingness to initiate and discuss the issue of a DNR order.

Patients and their families' views on resuscitation status

There are research results showing that patients would prefer to have decisions regarding resuscitation discussed with them [25]. A study led on an oncology ward which explored patients (most of whom had advanced metastatic cancer), their relatives and physicians' views on CPR [26], has shown that the majority of the patients (58%) were in favour of receiving resuscitation if necessary. They were also eager to be involved in the discussions regarding the procedure. Their relatives had similar preferences. Interestingly enough, there was a visible discrepancy between doctors and patients' views.

Another study — *A Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment* — indicates that 33–50% of patients with advanced cancer did not want resuscitation, but wanted DNAR orders 3–6 months before death [27].

Physicians' views on discussing DNR orders with patients and families

The study conducted on the oncology ward mentioned above has shown that medical professionals considered most of the patients not appropriate for CPR due to clinical factors. Moreover, in their opinion there was no need to discuss DNR orders with the majority of patients. Another study's findings [11] confirm this by demonstrating that healthcare professionals were reluctant to discuss CPR with patients, in spite of patients finding such a discussion beneficial [28, 26].

Another piece of research, which examined palliative care physicians from three different regions (Canada, Europe and South Africa), shows that the vast majority of participants agree on the importance of having DNR orders and discussing them with all palliative care patients. Importantly and strangely enough, the study found that physicians from Europe strongly believe that DNR orders are appropriate, but at the same time many patients under their care die without having such orders [29]. Physicians may be reluctant to discuss a resuscitation status with patients, as they may be worried that this will badly influence their relationship with a patient by giving the impression that they are — instead of providing care — withholding it [30].

As presented, the opinions on discussing resuscitation issues with patients are not unanimous among healthcare professionals. Some of them, who are

in favour of talking resuscitation status over with terminally ill patients, claim that discussion about CPR is as important as discussing any other treatment. It is argued that inadequate communication and a lack of proper information may lead to poor patient satisfaction, symptom management and compliance [31]. Others argue that by offering terminally ill patients the option of CPR, they are in fact being offered a very unrealistic choice [32, 33] and that the discussion of resuscitation may be the cause of unnecessary and easily avoidable distress [6, 32].

What has to be properly understood is that 'discussion with the patient' should not be interpreted as "asking the patient" for a decision [34]. This discussion should rather be seen as a way of going through the issue of a CPR/DNR order with patients and finding out their opinions and their understanding of the situation. Physicians are encouraged to take into account patients' wishes and preferences; they are not, however, obliged to comply with them. At the same time they are not bound to discuss resuscitation or a DNR order with every patient.

Factors to be considered by physicians

In making decisions concerning CPR, medical professionals should consider the benefits, burdens and risks of the treatment, taking into account the concrete situation of each individual patient. This is why it is reasonable to argue that there cannot be a blanket ban on CPR in palliative care.

If for a particular patient CPR would be futile and should not, therefore, be attempted, a physician should carefully consider whether it is indicated or appropriate to tell the patient that a DNR decision has been made. Importantly, a physician should not make any assumptions about a patient's preferences, bearing in mind that some patients may wish to be told, while others may find discussion of the issue extremely burdensome. If the discussion takes place, the issue should be talked over in a sensitive way [2].

The Polish Medical Code of Ethics states simply, and rather insensitively, that a physician has no obligation to initiate CPR and so-called "overzealous therapy" for terminally ill patients. It further stipulates that the decision to forgo resuscitation is made by a physician and is related to the balance of clinical outcome factors [23].

Physicians' fear of litigation

Last but not least, healthcare professionals may fear litigation and this may influence their decisions, usually resulting in not making DNR orders [18].

A written policy on DNR orders in palliative care units, together with a careful recording of the decision regarding resuscitation in patients' notes, connected with good communication among the medical team, may be an effective solution. The best interests of many terminally ill patients require physicians to make DNR decisions, as very often this is a kind of safeguard against disturbance of the peaceful and comfortable process of dying.

Conclusion

For the majority of palliative care patients CPR would not be appropriate. However, due to the fact that palliative care's role has been redefined and expanded, there cannot be a blanket policy rejecting CPR. Indeed, some palliative care patients (especially those in the earlier stages of diseases, both malignant and nonmalignant) may well benefit from CPR.

For those who are dying and for whom CPR would not be indicated, a DNR order appears to be the optimal solution. It protects against dying in an undignified and traumatic manner. It allows the avoidance of disturbance in the natural process of passing away, which would certainly happen if unwanted and inappropriate CPR were to be initiated.

Medical professionals should not refrain from making DNR orders as this may have serious consequences for a patient. Although giving weight to patients' wishes and preferences and discussing the issue of resuscitation is recommended as good practice, it is the physicians' sole judgement and decision as to whether to forgo CPR; it is their responsibility to consider whether a DNR order is suitable and indicated. It is also their duty to take into account any discussion on the issue with patients and/or their relatives.

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