

Medical Residents' Practices and Perceptions toward Do-Not-Resuscitate (DNR) Order

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Abstract

The knowledge and implementation skills of the DNR order amongst physicians in training appear to be quite variable. Few studies had assessed residents' views on this complex topic. Our objective was to describe the medical residents' practices and perceptions toward DNR order. A 26 question survey was distributed to medical residents during the academic day activity. Only 56 residents completed the questionnaire (75% response rate). 61.40% of the residents understood the definition of DNR order. 85.96% thought physicians shouldn't order diagnostic tests for DNR patients and 92.98% thought physicians shouldn't give blood products and antibiotics to DNR patients. 45.61% thought DNR order would lead to poor care. 36.84% thought physician alone should decide about the DNR decision. 45.61% answered that DNR order never discussed with patients. 64.91% answered that consultant discussed DNR order with patients. 42.11% of residents were involved in the discussion of DNR order. 66.67% answered that time to decide about the DNR order on day of admission. 42.11% answered there was variation between consultants regarding the care of DNR patient. 43.86% answered there was variation in the clinical care before and after DNR order was placed. 87.72% thought there was a need for formal training in DNR discussion. 68.42% didn't know if KFSH and RC had clinical guidelines for DNR patients care.

Conclusion: (1) Majority of the residents had misunderstanding regarding DNR patient care and comfortable care. There is a need for developing a structured residency program curriculum to address resident skills in end-of-life care. (2) Encouraged discussions DNR issues in the outpatient setting could prevent unwanted resuscitation in the acute setting. (3) Efforts are needed to increase patients and their families' awareness about the meaning of DNR order. (4) There is a need to unify and improve quality of care provided to DNR patients by developing specific strategies within a framework of goals of care.

Keywords: Do not resuscitate; Residents; Perceptions; End-of-life care

Introduction

Several surveys suggested that the majority of hospitalized patients died with a DNR (do not resuscitate) order in place [1]. In the mid-1970s, hospitals began to implement policies on DNR orders. These policies served to establish procedures for writing DNR orders [2]. Research showed that about 5% of patients who required advanced cardiac life support (ACLS) outside the hospital and 15% of patients who required ACLS while in the hospital survive [3,4]. Elderly were living in nursing homes, had multiple medical problems, or who had advanced cancer been much less likely to survive [5].

DNR order sometimes called a "No Code", DNAR (do not attempt resuscitation). DNR means if the patient in cardiac or respiratory arrest, NO chest compressions, ventilation, defibrillation, endotracheal intubation, or advanced cardiac life support medications. DNR is a legal order written in the hospital for a patient to not undergo CPR or ACLS. When the patient is identified as being appropriate for DNR status, the treating physician must document and sign in the progress notes his/her reasons for reaching this decision [6]. The American Medical Association's Council on Ethical and Judicial Affairs published

guidelines indicating that DNR orders only preclude resuscitative efforts and shouldn't influence other therapeutic interventions that may be appropriate [7]. In clinical practice there are many patients have DNR order because of comorbidities and poor outcomes and they may have frequent admissions to the hospital because of acute illnesses which are treatable. The challenge is to avoid over-treatment, which prolongs suffering and postpones the shift from a cure-oriented to a comfort-oriented approach, while at the same time avoiding precipitous decisions to withdraw treatment which could lead to potentially avoidable deaths [8]. To ensure appropriate decision making, physicians need a solid grounding in the principles of medical ethics. Equally important, physicians need to work effectively and closely with patient/families to make the right decisions [9]. There is effort to improve communication between physicians and patients about end-of-life decisions by promoting quality of care for the dying [10].

Few studies had assessed internal medicine residents' views on this complex topic. The knowledge and implementation skills of the DNR order amongst physicians in training appear to be quite variable.

Objective

To describe the medical residents' practices and perceptions toward DNR Orders at King Faisal Specialist hospital & Research Centre (KFSH and RC).

Method

A 26 question survey distributed to medical residents at KFSH and RC during the academic day activity. Each question had multiple-choice options. Completion of the questioners was voluntary. The questioners' sheet would be collected by the chief resident at the end of the academic day activity.

Statistical Analysis

All the statistical analysis of data was done by using Microsoft excel.

Results

A total number of residents were 75 in 2013. Only 56 residents completed the questionnaire (75% response rate). Demographic data as presented in Table 1. Majority of the residents (61.40%) understood the definition of DNR order, 71.93% knew the difference between DNR patient care and comfortable care. 85.96% of residents thought physicians shouldn't order diagnostic tests for DNR patients and 92.98% of them thought physicians shouldn't give blood products and antibiotics to patients with DNR order. 45.61% of the residents thought DNR order would lead to poor patient care. 36.84% thought physician alone should decide about the DNR decision. 43.86% of them thought that physician and patient should decide about the DNR decision however 45.61% of them answered that DNR order was never discussed with patients in clinical practice. 42.11% answered it was discussed with the patient's relatives. 64.91% of residents answered that consultant usually discussing the DNR order with patients and 75.44% with patient's relatives.

	Number	Percent (%)	Specialty
First year residents	24	42.11	Internal medicine
second year residents	10	17.54	Internal medicine
third year resident	10	17.54	Internal medicine
fourth year residents	12	21.05	Internal medicine
Male residents	37	64.91	Internal medicine
female residents	19	35.09	Internal medicine

Table 1: Demographic data.

The reasons that the DNR order didn't discuss with the patients because patient was sick and couldn't make decision 54.39%, it was the medical team decision 24.56%, patient's relatives didn't want patient to know about the DNR order 14.04% and patient's relatives didn't want patient to know about his/her medical condition 3.51%. 31.58%, of residents thought that patient's relative refused DNR order because family misunderstanding of the DNR order, 28.07% of relatives afraid of guilty if didn't give full care, 22.81% it was against their believes and afraid of patients poor care 15.79%. 47.37% of residents thought age was important risk factor to decide about DNR order. Time to decide about the DNR order on day of admission was 66.67%, during

hospitalization when patient wasn't responding to management 43.86%. There was variation in the clinical care before and after DNR order was placed 43.86%, most of the time there was variation between consultants regarding the clinical care of DNR patient 42.11%. Residents were involved in the discussion of DNR order 42.11%. However 42.11% residents didn't feel comfortable to discuss the DNR order with patient or relatives and they would leave it to other member in the team but 38.60% would be comfortable in the presence of the consultant. 87.72% thought there was a need for formal training in DNR discussion. 66.67% of residents didn't know if KFSH and RC had clinical guidelines for DNR order and 68.42% didn't know if KFSH and RC had clinical guidelines about the DNR patients care.

Discussion

In this survey majority of the residents understood the definition of DNR order and knew the difference between DNR patient care and comfortable care. In spite of that 85.96% of residents thought physicians shouldn't order diagnostic tests for DNR patients and 92.98% of them thought physicians shouldn't give blood products and antibiotics to patients with DNR order. The residents had misunderstanding regarding clinical care of the DNR patient and comfortable care.

In one survey of 155 medicine and surgery residents, 43% would withhold blood products and 32% would not give antibiotics to a patient with a DNR order. Some believed that diagnostic tests shouldn't be ordered when a patient was DNR [2]. One Study surveyed primary and cross-covering residents of patients with DNR orders and found that residents intended to withhold a variety of other therapeutic interventions, that in half of these instances there was no chart documentation to that effect, and that there was little agreement between primary and cross-covering residents regarding which therapies to withhold [11,12]. It must be emphasized that a decision to withhold CPR means only that death accepted when it occurred with no implications for all other aspects of care for the patient.

There was a variation in the clinical care before and after DNR order. DNR orders had been affected by the culture of the physician, attitude of the country and religious beliefs. European studies had revealed that physicians' and patients' religion could cause significant differences in the use of end-of-life therapies with values and practices differing from country to country [13]. Differences in training and personal religious beliefs have been suggested as responsible for variations in attitudes [1].

Residents were uncommon to be involved in the discussion of DNR order. Previous studies demonstrated that communication skills can be taught and result in improved competence. Teaching skills in breaking bad news and managing family conflicts are important to prepare future providers to assist patients and families navigate through the complex and difficult decisions surrounding resuscitation decisions. [2].

Many physicians didn't know their patients' preferences for resuscitation, and had a very poor understanding of their own resuscitation order [14]. Many studies showed that most patients were never asked by a doctor if they wished to be resuscitated, despite a desire to express their wishes. Data from the SUPPORT (Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment) project, canvassing almost 1000 seriously ill elderly patients, noted that only one quarter had ever discussed CPR with a physician. A survey of 400 nursing home patients showed that they

had ever been asked about CPR by a doctor. Encouraged discussions DNR issues in the outpatient setting could prevent unwanted resuscitation in the acute setting.

Several studies suggested that patients would decline quantity of life in the absence of quality [1]. A common misunderstanding patients and families have is that CPR would keep patients alive and living as they were before the code. The patient and family may have had the misconception that there would be less care and fewer interventions. Further efforts should be offered to increase patients and their families' awareness about the meaning of DNR order [15]. Many studies showed that age alone wasn't a contraindication for therapeutic interventions, but only one among several factors to be considered in determining the risks and benefits of a given treatment. Age alone wasn't the main determinant of CP success [16,17].

Medical schools and residency programs didn't require formal training in communication and decision-making about DNR orders. There would be increasing demands on educators to teach end-of-life issues and communication with patients about goals of care and preferences regarding resuscitation. Most residents usually learn to lead DNR discussions informally through a "see one, do one, teach one" approach whereby misconceptions about DNR orders and inappropriate approaches could be perpetuated [18,19]. Residents mention lack role models as a reason for their lack of competence in conducting DNR discussions [18,20].

Conclusion

(1) Majority of the residents had misunderstanding regarding DNR patient care and comfortable care. There is a need for developing a structured residency program curriculum to address resident skills in end-of-life care. (2) Encouraged discussions DNR issues in the outpatient setting could prevent unwanted resuscitation in the acute setting. (3) Efforts are needed to increase patients and their families' awareness about the meaning of DNR order. (4) There is a need to unify and improve quality of care provided to DNR patients by developing specific strategies within a framework of goals of care.

Conflict of interest

The authors have no conflicts of interest and no financial relationships with any organizations that might have an interest in the submitted work.

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