ORIGINAL ARTICLE

Nurses' attitudes towards Do Not Attempt Resuscitation orders

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Abstract

Introduction: Do Not Attempt Resuscitation (DNAR) orders represent a difficult and challenging area of practice for many health professionals. Many studies have examined the perspective of physicians, but recent changes have enhanced the role of nurses in the UK. Despite this, there remains a knowledge gap regarding their interactions with DNAR orders.

Aim: To explore the opinions and experiences of nursing staff on DNAR orders.

Methods: We surveyed nursing staff in a major teaching hospital using a structured tool.

Results: 251 nurses were invited to participate in the study. 178 completed forms were received (response rate 70.9%). One third of respondents reported the presence of a resuscitation policy on their ward, although no official policy existed in the hospital. 91% of nurses would resuscitate by default if no decision on DNAR had been made. Most believed that consultants or patients should make decisions, and felt it was the role of the physician to inform the patient. 70% stated that DNAR orders were only clear "sometimes"; and 15% that physicians never discuss them with nurses. 52% said that all hospital patients should be routinely asked if they would like to be resuscitated. 35% have disagreed with a DNAR decision. Nurses overestimated the mean survival rate at cardiac arrests to be 34%. 76% believe they need more training.

Conclusion: There is considerable interest in DNAR orders among nursing staff. There was dissatisfaction with regard to how DNAR orders work, including a perceived lack of communication from physicians and lack of clarity in the orders. There is a need for further education and cooperation in this area.

Key words

Do Not Attempt Resuscitation orders, Resuscitation, Nurses, Attitudes, Survey

1 Introduction

Do Not Attempt Resuscitation (DNAR) orders represent a difficult and challenging area for many healthcare practitioners. Cardiopulmonary resuscitation (CPR) came into practice in the 1960s to try to restore circulation and respiratory effort for anaesthetised patients who developed cardiac arrest [1, 2]. It subsequently began to be applied to all hospital inpatients, and concern was expressed that it might inappropriately prolong the death of patients who were in the terminal stage [3].In an effort to prevent this, DNAR orders were developed in the 1970s in the United States [4].

Many countries now use DNAR orders but not all have a specific legal framework. Physicians have expressed dissatisfaction at their own understanding of the issues involved [5]. There is also considerable variation in the formulation, recording and practice of DNAR orders [6-8]. Nurses also encounter DNAR orders frequently and there are few published studies which have examined their perspective [9]. Not enough is known about nurses' interaction with DNAR orders and how involved nurses are, or wish to be, in the decision-making process.

2 Aim

We aimed to explore the opinions and experiences of nursing staff on DNAR orders, using a structured tool.

3 Methods

Cross-sectional survey of all nurses working on inpatient wards over a 24 hour period, on 2 sites: a university teaching hospital with 851 beds including medical, surgical, psychiatry and day-case; and a rehabilitation hospital with 52 beds and a co-located 91-bed continuing care ward.

Table 1. Survey questionnaire & summary of responses

No	Question text	Responses
1	Please indicate your nursing experience in years	(See Table 2)
2	Are you aware of a **written hospital policy** on DNAR orders?	Yes 33% No 67%
3	If resuscitation status has **NOT** been decided for a patient what do you do?	Do Resuscitate 91% Do Not Resuscitate 9%
4	How do you know **which** patients are DNAR? (**more than one** response possible)	Written in medical notes 99% Written in nursing notes 62% Written on patient board 4% Verbal handover from nurses56% Don't know 0% Other: 0%
5	Who should decide on DNAR status? (**more than one** response possible)	Consultant 91% Registrar 43% Senior House Officer 11% Intern 3% (Rank of hospital physician, in decreasing order) Nurse 22% Patient 64% Family 74%
6	Should the patient be informed?	Always 45% Sometimes 47% Never 8%
7	If yes, who should inform the patient? (**more than one** response possible)	Physician 87% Nurse 25% Family 35% Nobody 0%
8	What format are most DNAR orders:	Written 52% Verbal 3% Both written and verbal 45% Neither 0%

Table 1 continued on page 45

Table 1. (Continued.)

No	Question text	Responses
9	Do you think that DNAR orders are clear?	Always 24% Sometimes 70% Never 6%
10	Do physicians discuss DNAR orders with you?	Always 22% Sometimes 63% Never 15%
11	Do physicians make the right DNAR decisions?	Always 24% Sometimes 74% Never 2%
12	Should all hospital patients be routinely asked if they would like to be DNAR?	Yes 52% No 48%
13	Should patients who are terminally ill be DNAR?	Always 33% Sometimes 55% Never 12%
14	Should cancer patients be DNAR?	Always 7% Sometimes 81% Never 12%
15	Should nursing home patients be DNAR?	Always 10% Sometimes 74% Never 16%
16	Should patients over 65 years be DNAR?	Always 4% Sometimes 63% Never 33%
17	Which of the following treatments **IS** appropriate in a patient who is NOT for resuscitation: (**more than one** response possible)	Oxygen 87% IV fluids 64% Antibiotics 39% NG feeding 36% Intubation 3% Defibrillation 2% NONE of these 0%
18	Do you think DNAR orders are effectively used?	Always 26% Sometimes 67% Never 7%
19	What % of cardiac arrests that you have attended have been successful?	Mean response 34%
20	Have you ever **disagreed** with a DNAR decision?	Yes 35% No 65%
21	What would you do if you **did not agree** with a DNAR decision?	Comply 36% Refuse to comply 0% Other: 64% **(See Table 3)**
22	Are you happy with your resuscitation skills?	Yes 54% No 46%
23	Do you think you need more training?	Yes 76% No 24%
24	Is there anything you would do to improve DNAR protocols?	**(See Table 4)**

A 24-item questionnaire was developed by the authors after consulting with experts and conducting a literature review. The questionnaire was piloted with 3 nurses involved with outpatient care. The tool was redrafted using feedback drawn from this process to improve the clarity of the questions and to allow some open text answers to explore opinions in a less rigid manner. The final questionnaire comprised both quantitative and qualitative elements (see Table 1). Opinions were sought on local DNAR policy, how DNAR orders should be made and used, and what treatments were appropriate in a patient with a DNAR order. Nurses were also asked about their experience of cardiac arrests and their satisfaction with their skills and training. Chairman's approval was given by the Chair of the local ethics committee.

4 Results

Two hundred and fifty one nurses were invited to participate in the study. One hundred and seventy-eight completed forms were received for a response rate 70.9%. Table 1 demonstrates the questionnaire and summarises the main results.

Table 2 shows the distribution of staff responders in the three clinical areas. They comprised general surgical and medical wards (including an acute geriatric medicine ward), intensive care areas, coronary care unit, the emergency department and all other inpatient wards.

Nurses had an overall mean of 13 years of experience (range 1-40) and had worked in a median of 3 hospitals (range 1-18).

Table 2. Distribution of staff responders

Area	Number of responses	Mean staff experience in years
Acute Hospital Wards	140	12 (range 1-39)
Rehabilitation hospital	24	15 (range 3-42)
Continuing care wards	14	12 (range 4-30)

4.1 Free responses

Respondents were given the opportunity to provide general opinions or feedback in two areas of the survey. In Question 21, they were asked to comment on what they might do if they disagreed with a DNAR decision. These comments are shown in Table 3.

Table 3. Answers to "What would you do if you did not agree with a DNAR decision?"

"I would voice my concerns"
"Give my opinion"
"Discuss further with the patient, family and multidisciplinary team"
"Give consideration to all aspects of the case"
"Document my opposition"
"Contact risk management"

In Question 24 they were asked "What would you do to improve DNAR policy?" Some of the responses are listed in Table 4.

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Table 4. Answers to "What would you do to improve DNAR policy?"

"There should be a written DNAR policy for patients to sign, and have physician and nurse sign it too."
"As much information as possible to be given to patient"
"Increased patient autonomy in decision making"
"There should be a DNAR form, with weekly review"
"Explain possible quality of life post resuscitation"
"An ethics team should be available to consult"
"Physicians are reluctant to write it down"
"Have a clear form in bright colour in front of notes that is easily found in the event of an emergency"
"Make DNAR study days compulsory"
"Have a clear concise protocol with effective lines of communication between physicians, nurses and patients"
"Note exactly what interventions are to be implemented if deterioration"
"Orders are sometimes written in the middle of the notes where they may not be seen for days"
"There should be clarity between DNAR status and active treatment"

5 Discussion

Many clinical areas do not have an official written policy on DNAR orders [5].This study was conducted within one institution comprising three hospital areas across two sites with a diverse patient population. At the time the study was conducted, there was no DNAR policy. However, one third of respondents reported being aware of one, suggesting that informal policies are in existence. In this study, most DNAR orders were in written form only (52%), with a further 45% both written and verbal. However, nurses reported using medical notes (99%), nursing notes (62%) and verbal handover from nurses (56%) to remain informed as to resuscitation status (more than one response was possible). Just 4% reported that it was marked on the patient list board in the ward.

When asked whether DNAR orders worked well, only 24% felt that they were always clear, and 26% responded that they were always used effectively. Two thirds of respondents reported that physicians only explained their decisions sometimes, and 11% said that they never did. However just 2% felt that physicians never make the right decisions about DNAR orders, with 74% saying sometimes and 24% always.

Over a third reported that they had disagreed with a DNAR decision on some occasion, and when asked if they would comply with the order in any case, one third also said they would. An open text box allowed further exploration of this area.

There were some findings that deserve further exploration—when asked what the default position was if no DNAR order had been made, 9% reported that they would not resuscitate. Of these, over half were on rehabilitation or continuing care

wards. Their response may have been due to a lack of resuscitation facilities in these care areas. However, more education may be required to reinforce optimal clinical pathways.

In addition, many respondents considered Oxygen, IV fluids, Antibiotics and Nasogastric feeding inappropriate in patients who had DNAR orders. Generally DNAR orders do not preclude such treatment. It appears that there is still some confusion over patients in whom a decision has been made not to offer further treatment because of palliation, and those who simply have a DNAR order (where all treatment options may be considered). There is of course overlap between the two areas and patients should be given an individual care plan that deals effectively with their needs. A small number of respondents also reported that intubation and defibrillation would be appropriate even in the presence of a DNAR order.

The profile of the respondents showed that there is a wealth of nursing experience on the wards, with a mean of 13 years' experience per respondent. They had worked in a median of 3 hospitals during their careers. In general they overestimated the percentage of cardiac arrests that had a successful outcome (34%). The accepted figure is probably about 17-23%, though there is variation in different ward areas [10, 11].

In the UK there is no national policy on DNAR orders, but many professional bodies have issued their own guidance. Recent guidelines issued by the British Medical Association, the Royal College of Nursing and the Resuscitation Council state that nurses are encouraged to take more involvement in DNAR decisions [12]. In some situations senior nurses can make these decisions. When asked who should decide, 91% of the respondents in this study felt it should be the consultant (the most senior member of the medical team). Only 22% felt that the nurse should have a role. This contrasts with a study by Thibault-Prevost et al, where 81% of respondents felt that nurses should be involved (although these were nurses working in the intensive care unit) [13]. However there was a clear feeling that the most junior physicians should not be making these decisions. More than two thirds felt that the patient or their family should have a role. This is similar to the study by Giles and Moule where 81% of respondents felt that the family should be involved [14].

Almost half of nurses surveyed would like to see all patients being asked routinely on admission whether they would like to be resuscitated. Forty-five percent agreed that patients should always be informed of a DNAR order concerning them, but 47% said "sometimes". The clinical situation does indeed demand on some occasions that patients should not be informed, e.g., if it were a futile intervention or if the knowledge might cause them some harm [15]. However it is accepted that one should maximise patient involvement in DNAR decisions [16]. The vast majority of respondents felt that it was the physician's responsibility to keep the patient informed. Only 25% felt that nurses had a responsibility to keep them informed, which again suggests a less involved position compared to the *status quo* in the UK.

Just over half of nurses surveyed were happy with their resuscitation skills, but three quarters said they would like more training. Currently, most clinical areas require their staff to renew their resuscitation certification every two years. Training is organised by the British Heart Foundation and provided at local centres. This suggests some dissatisfaction with training received in this process.

Previous studies in this area have focussed on one particular nursing specialty, such as critical care, oncology or geriatric medicine [13, 17, 18]. This survey was performed in a university teaching hospital, and included nursing staff from many varied ward areas. The response rate was particularly good at almost 71%, representing an interest in this topic among the respondents. The rate may have been increased by performing the questionnaire over multiple days. The questionnaire used allowed for a diverse range of views to be expressed and several aspects of DNAR orders were explored.

It is clear that further work on guidelines for DNAR orders is required. Opinions should be sought from all stakeholders. Some clear and practical suggestions were made in the free text responses in this survey. Nurses are an important and often neglected group when it comes to resuscitation decisions. Reform of DNAR guidelines should consider their views. In addition it is clear that interprofessional education should be employed to help achieve better cooperation between healthcare staff in this important and relevant area.

Study limitations: This was a single-centre questionnaire, performed over a short period of time. Results may not be generalisable to other contexts.

6 Conclusion

There is considerable interest in DNAR orders among nursing staff. Most expressed dissatisfaction with regard to how DNAR orders work, and in particular, with a perceived lack of communication from physicians. There is a need for more education in this area, and DNAR guidelines should be formulated considering the views of all stakeholders. Nurses involved in our study may not have the same desire to become more involved in making DNAR orders as their UK counterparts.

Key points:

- Nurses feel that DNAR orders are not sufficiently clear
- Communication of DNAR status, especially from physicians, could be improved
- The vast majority of nurses felt that senior physicians should make DNAR decisions, not nurses
- Almost half of the respondents felt that everyone admitted to hospital should have their DNAR status documented
- Most nurses would like more training to improve their resuscitation skills

Conflict of interest statement

The authors declare that they have no conflict of interest.

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