

Attitude of doctors working in a tertiary hospital towards Do-not-resuscitate decisions

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ABSTRACT

Introduction: There has been many discussions around the world regarding various forms of end-of-life decisions and healthcare professionals might have different views towards do not resuscitate (DNR) which might have been influenced by the medical education, especially after clinical training. Hence this study is designed to explore the attitudes of doctors towards DNR decision.

Methodology: This was a descriptive cross-sectional study conducted between August 2016 to November 2016 in Patan Hospital. Preformed structured questionnaires were given and the experience of events occurring around DNR decisions and problems associated with it were assessed. The attitude towards DNR was assessed using Likert scale and calculating their mean scores.

Result: Out of 106 respondents, there were total 53 interns and 53 medical officers. Almost all the doctors (96.2%) had experience in CPR and majority (88.7 %) had experience of dealing with death of a patient and had administered CPR even when there was DNR decision. The mean score of the doctor's attitude towards DNR was 3.44, most of the doctors, especially interns had conflicts with family members while taking DNR decisions.

Conclusion: This study reflects that doctors working in Patan Hospital have a positive attitude towards DNR decisions.

Keywords: attitude, doctors, do not resuscitate

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INTRODUCTION

There has been many discussions around the world regarding various forms of end-of-life decisions and there still prevails debates regarding the ethics, legalities and appropriate medical indications for the use of do-not-resuscitate (DNR) orders.¹ Healthcare professionals might have different attitudes towards DNR which is influenced by their medical education and clinical experience.²

Do-not-resuscitate (DNR) orders still fail to adequately fulfill their two intended purposes—to support patient autonomy and to prevent non-beneficial interventions.³ The changing the hospital culture, reforming hospital policies on DNR discussions, mandating provider communication skills training, and using financial incentives could help overcome existing barriers to proper DNR discussions. So, the primary objective of this study was to find the attitude of doctors working in a tertiary hospital towards DNR decisions.

METHODS

This was a descriptive cross-sectional study conducted at Patan Hospital between August 2016 to November 2016. Total of 106 doctors were enrolled in the study. The sample size was calculated by the formula $n = z^2 \times p(1-p) / d^2$ where z was confidence interval of 1.96, estimated prevalence (p) of 50% and margin of error (d) 10%. Preformed structured questionnaires were given and the experience of events occurring around DNR decisions was assessed. A researcher tailored questionnaire which was used by Masood Fallahi et al⁴ in a similar study was used, which was a modification of the questionnaire designed by Dunn⁵ to assess the attitude of medical personnel towards DNR orders. Few questions were added from the questionnaire designed by H-M Hilden et al⁶ which highlighted the problems associated with DNR decisions. The attitude towards DNR was assessed using Likert scale and calculating their mean scores. The result's significance was calculated using Chi square and calculating P value and the statistical data was analyzed using SPSS 24th version.

RESULTS

During the study period, a total of 106 doctors were given preformed structured questionnaires among which 53 were interns and 53 were medical officers. Among the respondents, 61.32% (N=65) were in age group 20-25 years and 37.73% (N=40) were in age group 26-30 years and 0.94% (N=1) was in age group 31-35 years.

There was male preponderance (55%) among the total respondents. Majority of the doctors involved in the study had work experience of less than 6 months (N=80, 76%), whereas 15% (N=16) had 6-12 months work experience and only 9% (N=10) had 1-2 years' work experience. The work experience only included their duration of internship or duration of working as medical officers for interns and medical officers respectively. The majority of respondents (17.92%) were working in Medicine department (Figure 1).

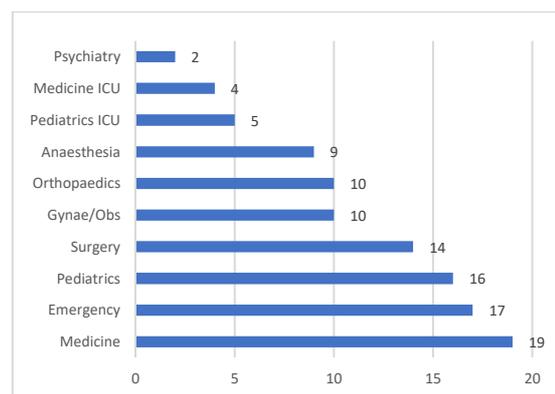


Figure 1. Doctors working in different departments included in this study (N=106)

Almost all of the participants had experience in CPR and had dealt with death of the patient. The proportion of doctors having experience of taking to patient or their relative about making decision of CPR and those who had withheld CPR when there was a DNR decision were similar (p -value > 0.05). Majority of the doctors ($n=94$) did not administer CPR when there was a documented DNR order (p -value < 0.05). (Table 1)

Table 1. Experience of events occurring around DNR decisions

Questions	Yes	No	p value
1. Experience in CPR	102 (96.2%)	4 (3.8%)	<0.001
2. Experience of Dealing with the death of a patient	94 (88.7%)	12 (11.3%)	<0.001
3. Experience of talking to a patient or relatives about making DNR decisions	56 (52.8%)	50 (47.2%)	0.56
4. Withheld CPR where there was DNR decision	45 (42.5%)	61 (57.5%)	0.12
5. Administered CPR where there was DNR decision	12 (11.3%)	94 (88.7%)	<0.001

The mean and SD of questions related to attitude regarding DNR are presented in Table 2, which demonstrated that questions such as “DNR decision should be written and reviewed daily in the patient's clinical chart” and “DNR order does not conflict with my religious and cultural beliefs” had higher points. According to results of the study, the mean score of the doctor's attitude towards DNR was 3.44 which indicates a significant positive attitude.

Table 2. Mean of attitude regarding DNR

Questions	Mean	±SD
1. It is essential to issue and execute the DNR order to patients in end stage of disease	3.66	±0.98
2. DNR order protects patients from pain and unnecessary suffering	3.66	±1.05
3. Issuance and executing of DNR order are morally correct.	3.59	±0.91
4. Issuance and executing DNR order is in accordance with human dignity of the patients	3.84	±0.71
5. DNR order helps to clarify the plan of patient treatment in later stages of life	3.88	±0.87
6. Patient should not be resuscitated, if CPR is futile from the view point of the health care providers	3.11	±1.17
7. For a patient for whom death is imminent, the DNR order should be issued	3.36	±1.17
8. The patient for whom death is inevitable during the next 6–12 months, the DNR order must be issued	2.58	±1.11
9. If CPR is futile for my loved ones, I want to issue the DNR order	3.20	±1.11
10. DNR order does not conflict with my religious and cultural beliefs	3.93	±0.80
11. DNR decision should be written and reviewed daily in the patient's clinical chart	4.07	±0.81
12. I feel adequately trained for discussing DNR decisions with patients and their family	2.89	±1.17
13. I am confident in discussing DNR decisions with patients and their family	3.00	±1.12

Table 3 shows that most of the doctors, especially interns had conflicts with family members while taking DNR decisions, but it was not statistically significant ($p=0.221$) Other problems that could affect DNR decisions were psychological stress associated with DNR decisions, difficulties in evaluating patient's prognosis and uncertainty of sufficient justification for issuing a DNR order.

Among the total respondents, more number of interns had problems of uncertainty of sufficient justification for issuing DNR order and conflicts with patients which were statistically significant ($p<0.05$) as shown in Table 43.

Table 3. Problems associated with DNR decisions.

Problems	A	B	N	p
1. Conflicts with family members	31	38	69	0.221
2. Psychological stress associated with DNR decisions.	32	35	67	0.687
3. Difficulties in evaluating patient's prognosis	25	32	57	0.242
4. Uncertainty of sufficient justification for issuing a DNR order	21	33	54	0.032
5. Lack of general instructions for DNR decisions	11	18	29	0.191
6. Conflicts with patient	3	14	17	0.007

A=Medical officers, B=Interns, N= Total, p= p value

DISCUSSION

In this study, the experience and attitude of doctors towards DNR decisions was studied. It was found that almost all of the participants (96.2 %) had experience in performing CPR and had dealt with death of the patient (88.7 %) but most of them have not administered CPR when DNR was signed ($p < 0.05$). This appears to be similar to a study done in Iran where 91.4 % of doctors had experience in CPR and 96.8 % had experience of dealing with the death of a patient.⁴ But, the proportion of doctors having experience of taking to patient or their relatives about making decision of CPR and those who had withheld CPR when there was a DNR decision were similar ($p > 0.05$).

In our study, when we studied the attitude of doctors towards DNR decision, it was found that majority of doctors strongly agreed that DNR decision should be written and reviewed daily in the patient's clinical chart. In a similar study carried out by Granza et al in a tertiary hospital in Portugal, physicians, nurses, health technicians and healthcare domestic staffs all strongly felt that the DNR should be noted explicitly in clinical charts.⁷ Most of the doctors agreed that issuance and executing DNR order is in accordance with human dignity of the patients.

According to results of the study, the mean score of the doctor's attitude towards DNR was 3.44 that indicate a significant positive attitude. This finding

was consistent with the study done by Fallahi et al in which the mean of attitude towards DNR was 3.22 which was considered significantly positive.⁴ The attitude of Iranian nurses towards DNR orders was found to be positive in a study done by Mogadashian et al, which included their tendency and willingness to learn more about DNR orders; considering the autonomy of patients ,caregivers and their family members in DNR decision making.⁸

Most of the doctors, especially interns had conflicts with family members while taking DNR decisions. Other problems that could affect DNR decisions were psychological stress associated with DNR decisions, difficulties in evaluating patient's prognosis and uncertainty of sufficient justification for issuing a DNR order. But in the study done by H-M Hilden et al⁶, they found that "difficulties in evaluating the patient's prognosis" was the most important factor affecting the DNR decision. Patient's situation, prognosis, quality of life, cost of intensive care services for end stage patients, a feeling of burden to others and family's desire to take care of the patient or not, also play important roles in DNR decision as seen in two different studies.⁹⁻¹⁰

Among the total respondents the medical officers have selected less factors regarding problems associated with DNR decision in comparison to the interns. This implies that as the doctors become medical officers from interns, their level of understanding about DNR increases and so they find less problems with DNR decisions in comparison to interns. But in the study done by Ghajarzadeh et al¹¹ patient's medical situation, lack of time, fear about patients and families reaction, religious beliefs, patient autonomy and available medical settings such as ICU beds are leading factors for DNR decision making.

CONCLUSION

This study reflects that doctors working in Patan Hospital have a positive attitude towards DNR decisions. Most of them have experience in CPR and in dealing with death of patient but there is still a need to train doctors and make them confident for discussing DNR decisions with patients and their family. It is also important that DNR decision should be documented and reviewed daily in the patient's clinical chart. It is time to bring about a change in physician behavior, which is imperative for

enhancing communication with patients and families about their goals and involving them in informed decisions about resuscitation preferences.

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