Research

The Impact of a "Do Not Resuscitate" (DNR) Status on Patient Care: A Descriptive Survey on the Perceptions of ICU and Medical/Surgical Nurses

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ABSTRACT

Background: Nursing research literature demonstrates a persistent concern regarding how nurses interpret "Do Not Resuscitate" (DNR) code status.
Aim: This study aimed to assess nurses' perceptions of the impact of a DNR code status on patient care.
Methods: This study was a cross-sectional, descriptive survey offered to all clinical nurses in the Medical, Surgical, Telemetry, Critical Care, and Emergency Departments within one urban community hospital in Southern California, USA. Descriptive statistics were used for demographic data and individual question analysis, which included frequency and percentages for categorical variables in addition to means with standard deviation for continuous data. Open-ended questions received content analysis.
Results: This study resulted in a convenience sample of 120 registered nurses (RNs). Greater than 95% of nurses who completed the survey agreed that nursing care should continue until patient death. Yet when asked about physiologic, demographic, chronic, or cognitive status, participants answered with varying degrees of certainty about the care that should be provided.
Conclusions: Further research is needed to explore the inconsistency in nurses' understanding of the care provided to a patient with DNR status. There may be opportunities to improve consistency in practice with education or protocols to outline optimal care of a patient with DNR orders.

Keywords: Resuscitation orders, cardiopulmonary resuscitation, nurses

INTRODUCTION

While the term "do not resuscitate" (DNR) may seem straightforward, care interventions provided to patients with a DNR order can be subjective and based on individual practices. This may result in patients receiving less or inappropriate care (Moffat et al., 2016). In hospitals worldwide, patients are asked to provide copies of advance directives and are routinely asked about code status upon admission to the hospital. The DNR information is a highlighted feature on an electronic medical record to indicate whether to perform resuscitation in the event of a cardiopulmonary arrest. Though the code status may be

clear, interpretations of its meaning and the care to be rendered are not. This is an issue recognized by authors internationally (Khalaileh, 2014; Kelly et al., 2021; O'Brien et al., 2018; Park et al., 2011; Thibault-Prevost et al., 2000).

BACKGROUND

Historically, DNR orders were known to indicate that cardiopulmonary resuscitation (CPR) is not to be performed if the patient should suffer cardiopulmonary arrest. DNR orders originated to protect patients from inappropriate, unwanted, or futile interventions, but over time the terms DNR and end-of-life have been conflated and can result in care being withheld (Fritz et al., 2017). DNR orders are not uniform in all hospitals, and inconsistent understanding of care practices for patients with a DNR have been noted internationally (Park et al., 2011). Nurses working at different hospitals see variations in ordering practices, as physicians can choose from a menu of options. Orders for options such as "Cardiopulmonary Arrest: check 'Yes CPR' or 'No CPR'" may seem quite clear, while "Respiratory Arrest: 'ok to intubate', 'no intubation' or 'comfort only'" orders may not be as clear, as respiratory distress is a subjective assessment and comfort care requires a separate order that each physician manually enters.

A Canadian study by Thibault-Prevost et al. (2000) researching critical care nurses' perceptions of care, noted that the term DNR was ambiguous and concluded there was a need for documentation of a comprehensive treatment plan and awareness of the rationale for the DNR. Variation in patient acuity provides an opportunity to address the meaning of DNR and limits unwanted interventions when patients experience cardiopulmonary arrest or withdrawal of life-sustaining measures at the end-of-life. Studies in Ireland and South Korea discuss how nurses manage patients with DNR code status daily, yet most do not have formal training in ethics or instructions specific to care for patients with a DNR order (Beckstrand et al., 2021; Park et al., 2011).

Pettersson et al.'s (2018) reflection study interviews confirmed the need to increase training for Swedish nurses and physicians to improve ethical competence regarding DNR decisions. The literature also warned that education in isolation was ineffective and suggested further research to identify effective training and improved communication regarding comprehensive treatment plans to yield a better solution (O'Brien et al., 2018). Limited understanding of DNR orders, staff education, experience with DNR orders, and lack of ethical competence contribute to misunderstandings that can result in gaps in care provided to patients with DNR orders (Kelly et al., 2021). This begs the question, is patient care affected by a patient's code status?

AIMThe purpose of this study was to determine the perceived impact of a DNR code status on nursing care provided to patients in the hospital. Care is defined as medical treatments

and nursing interventions carried out by clinical nurses for patients admitted via the Emergency Department (ED) or directly to the hospital. It is important to understand nurse perceptions to ensure appropriate and consistent care is provided to patients with a DNR order.

METHODS

The design for this DNR study was a cross-sectional, descriptive survey with both quantitative and open-ended questions. The survey was offered to all clinical registered nurses (RNs) in the Medical, Surgical, Telemetry, Critical Care, and ED at a 264-licensed bed, urban, community hospital in Southern California, U.S.A., within an integrated healthcare organization.

The survey was modified from the original "Nurses Perceptions Surrounding DNR Status in the Critical Care Setting Survey" a 68-item survey of nurses registered with the Alberta Association of Registered Nurses (Thibault-Prevost et al., 2000). The choice to modify the original was made to, first, remove all department and site-specific questions and, second, decrease the survey length, ensuring ease of completion.

The original DNR survey included 68 questions and case studies, and this modified version was made up of 15 overarching questions**.** Eight questions included multiple sub questions. There were seven open-ended questions (i.e., How do you define "Do Not Resuscitate", What do you think are the role components of a nurse caring for someone who is a DNR?). The survey modifications were made by a group of seven expert nurses from the medical center's research committee, including clinical staff nurses, a nurse educator, a nurse informatician, an ICU manager, and a clinical nurse specialist. Each member of the group individually reviewed all questions of the original Thibault-Prevost et al. (2000) survey and assigned a 3-point Likert score from 0 (not applicable to this study) to 2 (extremely applicable). All questions with an average of 1.5 and higher were considered for the draft of the new survey.

The final survey was then reviewed by the original team and 10 additional clinical nurses to test for readability, ease of understanding, question clarity, and that the questions answer our study aim. Open-ended questions for this study were derived from the original survey concepts and revised for simpler language to elicit meaningful responses.

The modified survey was placed in an online platform, SurveyMonkey® where a link and quick response code was provided to nurses in the Critical Care, Medical/Surgical/Telemetry (MST), and ED. Exclusion criteria included non-clinical nurses and nurses who worked in other areas of the hospital, such as postpartum, or peri-operative areas. Recruitment included the use of flyers, emails, and discussions of the study background and protocol at staff and committee meetings for voluntary and anonymous completion of the survey. An informational letter was placed at the beginning of the survey, and participants' consent was

obtained with a 'yes I agree' choice. Institutional Review Board approval was obtained before the survey was opened for use.

Data were analyzed using IBM SPSS Statistics (Version 27). Descriptive statistics were used for demographic data and individual question analysis, which included frequency and percentages for categorical variables in addition to means with standard deviation for any continuous data. Wording from answered open-ended questions regarding barriers and facilitators received content analysis. Answers were analyzed and put into concepts and coded. Codes were then categorized and synthesized into specific themes using *Thematic analysis* (Boyatis, 1998).

RESULTS

Data were collected over a 10-week period, from the beginning of April to mid-June of 2021. Of the 215 people who opened the survey, 29 declined to complete it after reading the introduction, and three indicated they were not RNs. Among the respondents, 63 RNs answered the first two demographic questions but left the rest of the survey blank. This resulted in a total end convenience sample of 120 RNs, and a 26.4% response rate. The demographics of the sample reflect an average of 14.05 (SD 9.18) years of experience, 70% with a Bachelor of Science degree, 57.5% working in critical care, and 36.7% working as MST nurses. See Table 1.

When asked to agree or disagree with statements concerning DNR status, seven of 14 questions indicated strong accord among respondents. Over 91% disagreed that a DNR is associated with no care. Over 95% of the respondents agreed that patients with a DNR order "…*should have nursing care until they die*". Maintaining the care of a patient with a DNR is further supported by the following responses: 83.3% disagreed that abnormal labs found through monitoring will not be treated, and 79.2% disagreed that a DNR patient becomes a lower priority when part of a multiple-patient assignment.

However, respondents had variation in their answers related to DNR involving additional therapeutic limits, such as decreasing inotropic medication and discontinuing mechanical ventilation, with 40.8% agreeing and 49.2 % disagreeing with these interventions when a patient becomes a DNR. Variation also occurred when asked if DNR orders should be followed by the withdrawal of aggressive therapeutic interventions (45.4% disagreed, 42.9% agreed). See Table 2.

Table 1.

Demographic Characteristics of Participants (n = 120)

Characteristics		
Years Practicing as an RN, mean (SD)	14.05	9.184
Years practicing at this Hospital, mean (SD)	7.55	4.69
Area of Specialty		
Medical/surgical/telemetry (includes oncology and orthopedics), n (%)	44	36.7
Critical care (Intensive care, definitive observation unit), n (%)	69	57.5
Other[1], n (%)	7	5.8
Highest Education		
ADN or Diploma, n (%)	13	10.8
BSN, n (%)	84	70.0
Graduate (Master's and Doctorate level), n (%)	23	19.2
Have Taken an Ethics Course		
Yes, n (%)	94	78.3
No, n (%)	26	21.7
Shift		
Days, n (%)	73	60.8
Evenings/Nights, n (%)	47	39.2

1 = worked on other units, in the ED, or chose not to answer

When asked how often specific nursing interventions are decreased or discontinued once a patient is designated a DNR, results showed "never" as the most popular response for all 15 interventions mentioned in this category. The most homogenous responses were noted to be for "oral care," with 73.9% answering "never"; "pain assessment," 79% answered "never" and "prn analgesics" with 79.7% "never" being decreased or discontinued. See Table 3.

Table 2.

Sample Agreement or Disagreement with the Following Statements Concerning DNR Status

	Disagree		Unsure		Agree	
Question	**n**	**%**	**n**	**%**	**n**	**%**
Do you associate DNR with no care	110	91.7	3	2.5	7	5.8
Do you think others associate DNR with no care	33	27.5	42	35.0	45	37.5

Does a DNR designation involve additional therapeutic limits (e.g.: stopping treatment, decreasing inotropes, discontinuing ventilation)?	59	49.2	12	10.0	49	40.8
An institutional and/or unit specific DNR policy is necessary to facilitate nursing practice	17	14.2	14	11.7	89	74.2
Admission to a critical care unit is appropriate for DNR patients	29	24.2	22	18.3	69	57.5
DNR patients receiving vent support have more interventions withdrawn than DNR patients without vent support	31	25.8	52	43.3	37	30.8
DNR patient should have all therapy maintained until they die	36	30.0	22	18.3	62	51.7
DNR patients should have nursing care maintained until they die	2	1.7	3	2.5	115	95.8
DNR orders should be followed by withdrawal of aggressive therapeutic interventions	54	45.0	14	11.7	51	42.5
Less care than necessary is given to DNR	84	70.0	16	13.3	18	15.0
A DNR patient, when one of multiple assignments becomes a lower priority for nursing care	95	79.2	9	7.5	16	13.3
Abnormal lab values found by means of monitoring will not be treated in DNR patients	100	83.3	4	3.3	16	13.3
Previous exposure to patient who were expected to die but survived influences a person's attitude toward DNR status	25	20.8	42	35.0	53	44.2
Differing definitions of the term DNR contribute to the complexity of DNR designation	9	7.5	16	13.3	95	79.2

Table 3.

How Often are the Following Nursing Interventions (Cares) Decreased or Discontinued Once Patients are DNR?

	Never		Sometimes		Always	
	n	%	n	%	n	%
Airway Suctioning	77	64.2	31	25.8	10	8.3
Vital Sign Monitoring	67	55.8	38	31.7	14	11.7
Tele Monitoring	53	44.2	48	40.0	17	14.2
Bathing	77	64.2	31	25.8	11	9.2
Oral Care	88	73.3	18	15.0	13	10.8
Turning Q2 Hours	78	65.0	31	25.8	10	8.3
Pressure Ulcer Prevention Measures	79	65.8	27	22.5	12	10.0
Reporting Critical Values	79	65.8	24	20.0	15	12.5
Bowel Regimen Maintenance (PRN stool softener/laxative)	71	59.2	28	23.3	19	15.8
IV Fluids	69	57.5	38	31.7	11	9.2
Pain Assessment	94	78.3	10	8.3	15	12.5
PRN Analgesics	94	78.3	8	6.7	16	13.3
Mobilizing (Ambulation/Transferring to Chair)	63	52.5	40	33.3	15	12.5
Escalation of Deterioration	70	58.3	30	25.0	18	15.0
Rapid Response Calls	67	55.8	35	29.2	17	14.2

Once a DNR status is put in place, the participants "disagreed" that the following therapies should be discontinued, analgesics (80.8%), oxygen (77.5%), fluid therapy (76.7%), antibiotics (75.8%) and vital signs (74.2%). Fifty-seven respondents (48.7%) indicated that they “disagree” that a ventilator should be discontinued once a patient is a DNR, while 38.5% agreed and 12.8% were unsure that a ventilator should be discontinued once a patient’s status was changed to DNR. The group was also divided on discontinuing inotropic or vasopressor agents, e.g., dopamine and epinephrine (52.5% disagree, 40.8% agree, and 6.7% unsure). See Table 4.

Table 4.

Indicate whether you agree or disagree with discontinuing medical therapies

	Disagree		Unsure		Agree	
Question	**n**	**%**	**n**	**%**	**n**	**%**
Ventilator Support	57	47.5	15	12.5	45	37.5
Inotropic or vasopressor agents (e.g. dopamine, epinephrine.)	63	52.5	8	6.7	49	40.8
Vital sign monitoring	89	74.2	2	1.7	29	24.2
Fluid therapy (IV)	92	76.7	3	2.5	25	20.8
Antibiotics	26	21.7	3	2.5	91	75.8
Blood products	85	70.8	7	5.8	28	23.3
Total parenteral nutrition	85	70.8	3	2.5	32	26.7
Tube Feeding	86	71.7	3	2.5	31	25.8
Analgesics	97	80.8	1	0.8	22	18.3
Oxygen	93	77.5	3	2.5	24	20.0
Telemetry monitoring (reworded from electrocardiographic monitoring)	81	67.5	7	5.8	32	26.7
Surgery	66	55.0	15	12.5	39	32.5
Physical Therapy	77	64.2	7	5.8	36	30.0
Hemodialysis (n=119)	74	61.7	7	5.8	38	31,7
Diagnostic imaging	78	65.0	5	4.2	37	30.8

When respondents were asked to agree, disagree, or mark unsure related to whether certain physiologic, demographic, chronic, or cognitive conditions shape the amount of care given to a DNR patient, participants answered with varying degrees of certainty. Items, that respondents agreed, have a greater impact on the amount of care a patient with a DNR order receives include severity of illness (65%), the likelihood of long-term survival (60.5%), level of consciousness (59.2%), cognitive status (57.5%), chronic health status (60%), and poor prognosis (63.3%). The age of the patient designated with a DNR status resulted in divided responses with 44.5% agreeing and 49.6% disagreeing that care will be influenced. Mental status was similar with 51.7 % in agreement and 43.2% in disagreement, as was length of stay and medical diagnosis, with 48.7% and 51.3% in agreement respectively, and 41.2 % in disagreement for both. Functional status and compliance with medical care also demonstrated variation in responses. See Table 5.

Table 5.

Indicate Whether You Agree or Disagree that the Following Factors Influence the Amount of Care

	Disagree		Unsure		Agree	
Question	**n**	**%**	**n**	**%**	**n**	**%**
Mental Status	51	42.5	6	5.0	61	50.8
Cognitive Status	44	36.7	7	5.8	69	57.5
Chronic Health Status	42	35.0	6	5.0	72	60.0
Severity of Illness	41	34.2	1	0.8	78	65.0
Likelihood of Long-Term Survival	40	33.3	7	5.8	72	60.0
Level of Consciousness	42	35.0	7	5.8	71	59.2
Poor Prognosis	38	31.7	6	5.0	76	63.3
Long Length of Stay	49	40.8	12	10.0	58	48.3
Age	59	49.2	7	5.8	53	44.2
Functional Status	44	36.7	8	6.7	68	56.7
Compliance with Medical Care	42	35.0	15	12.5	63	52.5
Medical Diagnosis	49	40.8	9	7.5	61	50.8

This hospital offers a menu of choices for DNR ordering which include DNR with or without intubation (DNI), or DNR with comfort or selected measures. Survey questions inquired about the nurses' level of understanding in carrying out each DNR order choice. Overall, findings showed consistency of understanding across the sample. When asked to determine the level of understanding of the order DNR/DNI with comfort measures only, 68.9% marked they 'always' understand this order, 30.3% marked 'sometimes', and 0.8% marked 'never'. When asked to determine the level of understanding of the order DNR/DNI and other selective treatments such as 'no pressors', 'no BiPap', 'no renal dialysis', participants answered with varying degrees of certainty. In this instance, 57.6% marked they 'always' understand this order, 39.8% marked 'sometimes', while 2.5% marked 'never'. When asked to determine the level of understanding when DNR with OK to intubate is ordered, 69.5% marked they 'always' understand this order, 25.4% marked 'sometimes', and 5.1% marked 'never'. See Table 6.

The study also assessed the nurses' feelings surrounding DNR decisions when caring for patients. Nurses expressed various emotions including relief, frustration, depression, indifference, contentment, anxiety, confusion, and powerlessness. The feeling of anger was the main outlier in this survey, with results as follows- never 72%, sometimes 27.1%, and always 0.8%. See Table 7.

Table 6.

Do You Understand the Nurses' Role in Carrying Out Each of the Following Orders?

Question	Never		Sometimes		Always		Total
	n	%	n	%	n	%	N
DNR/DNI with comfort measures only	1	0.8	36	30.3	82	68.9	119
DNR/DNI and other selective treatment (No Pressors, Bipap, or Dialysis)	3	2.5	47	39.8	68	57.6	118
DNR with OK to intubate	6	5.1	30	25.4	82	69.5	118

Table 7.

How often do you experience the following feelings surrounding DNR decisions?

Question	Never		Sometimes		Always		Total
	n	%	n	%	n	%	N
Relief	29	24.6	76	64.4	13	11.0	118
Frustration	47	39.8	67	56.8	4	3.4	118
Anger	85	72.0	32	27.1	1	0.8	118
Depression	67	57.3	47	40.2	3	2.6	117
Indifference	58	49.2	58	49.2	2	1.7	118
Contentment	52	44.4	60	51.3	5	4.3	117
Anxiety	67	57.3	48	41.0	2	1.7	117
Confusion	57	48.3	56	47.5	5	4.2	118
Powerless	53	45.7	59	50.9	4	3.4	116

Questions were asked to determine how often nurses used certain strategies to help care for patients with DNR orders. Most respondents would 'never' avoid the patient or their family (79.7%), request an assignment change (83.1%), or regard the patient as dead (83.8%). Participants also agreed that interventions and care should 'always' be performed to ensure the patient looks presentable and comfortable (81.4%). Many participants also claimed they would implement strategies that would ensure that the patient does not die alone (62.4%), while also believing that patients may 'sometimes' improve (76.3%). In other instances, variation was found across the sample when another use of strategies was surveyed. For example, when asked if respondents would do extra for the family, the majority

marked 'sometimes' (60.3%), 27.6% marked 'always', and 12.1% said 'never'. Another variation was found where participants responded they 'never' experienced emotional withdrawal from the patients with DNR orders (55.6%), whereas others responded they experienced emotional withdrawal 'sometimes' (41.9%). See Table 8.

Table 8.

How often do you use the Following Strategies to Help You Care for Patients with DNR Orders?

Question	Never		Sometimes		Always		Total
	n	%	n	%	n	%	N
Avoidance of the patient/ family	94	79.7	22	18.6	2	1.7	118
Do extra for the family (bend visiting rules, coffee, etc.)	14	12.1	70	60.3	32	27.6	116
Request an assignment change	98	83.1	19	16.1	1	0.8	118
Believe the patient will improve	21	17.8	90	76.3	7	5.9	118
Ensure patient does not die alone	9	7.7	35	29.9	73	62.4	117
Emotional withdrawal from patient	65	55.6	49	41.9	3	2.6	117
Regard patient as dead	98	83.8	16	13.7	3	2.6	117
Ensure patient looks presentable and comfortable	7	5.9	15	12.7	96	81.4	118

QUALITATIVE FINDINGS

Defining DNR

Participants were asked via an open-ended question, 'How would you define DNR?' with 97 responses provided. After coding, categories could be divided into two areas: 1) what DNR is and 2) what DNR is not. Respondents defined DNR as no CPR if the patient's heart stops, and no compressions, intubation, or other interventions are initiated to restart their heartbeat. Many comments included the wording of 'not bringing someone back to life' as expressed in this statement, *"If my*

heart stops working or I can be considered clinically dead, do not resuscitate me back to life with any measures."

Medications, non-invasive treatments, and comfort care measures were some of the nursing interventions included in the responses regarding care provided to patients with a DNR. One nurse commented, *"Basic bedside nursing care is still done, such as keeping the patient comfortable and clean."* Additionally, one nurse reported that patients with a DNR still have the ability to make care-related decisions, which included specific interventions such as intubation.

As to what DNR is not, nurses reported it as the absence of 'heroic' or 'aggressive' measures or interventions. Additionally, it was specifically reported that DNR does not mean "do not treat". This theme was also expressed in other open-ended questions in the survey. Comments included: *"DNR doesn't mean we are not supposed to treat. We have to treat which is appropriate for the patient"* and *"DNR simply means no resuscitation, but still, we will provide holistic nursing care such as pain management."*

Factors Influencing DNR Care

This study also asked nurses what other factors, besides the ones listed, influenced the amount of care provided to a patient designated DNR. Some respondents wanted to consider patient and family wishes with a response of "*Patient and family motivation/desire to participate or continue care*." One nurse responded with "*the patient's willingness to participate in care when the patient wishes for comfort care*." Another nurse responded, "*Depending if the POA [power of attorney] and the specifics of the DNR status, I continue full care unless they become comfort care only*."

When asked if there were any new interventions that could be provided once a patient is a DNR, 16 responses were provided where some staff stressed the importance of maintaining the same care. One nurse responded, *"A patient that is DNR should receive the same nursing cares/interventions as any other patient."* Other responses included providing psychological support for both patient and family, advocacy, ensuring that the patient is comfortable, and one suggestion of music therapy.

DISCUSSION

In 2000 Thibault-Prevost et al. queried nurses regarding perceptions of DNR decisions, with results showing ambiguity around the term DNR. Over twenty years later, our study findings mirror this result. Another study of Jordanian nurses using the Thibault-Prevost et al (2000) Perceptions and Attitudes to DNR questionnaire showed nurses want clear standards for the care of DNR patients. This was consistent with the current study where nurses had varying degrees of understanding of their role in carrying out the various levels of DNR orders. Nurses in this current study overwhelmingly agreed that nursing care should be

maintained for a patient with a DNR order. However, when asked about discontinuing specific nursing care for DNR patients, respondents, in fact, agreed that some treatments should be limited. While 95.8% of respondents indicated that DNR patients should have nursing care until they die, they also responded "always" or "sometimes" to decreasing or discontinuing specific nursing interventions. This incongruent response may suggest an inadequate understanding of the intent of a DNR order and the care that should be maintained for these patients but may also reflect a more nuanced association with the medically appropriate or patient-specified intensity of treatment. Respondents overwhelmingly agreed that oral care, pain assessment, and prn analgesics would "never" be discontinued. This study further identifies a need for an improved understanding of the term DNR so as not to conflate it with other comfort or end-of-life care.

The respondents also demonstrated significant variation regarding factors that influence the amount of care a patient receives, such as cognitive impairment, length of stay, or poor prognosis, as seen in Table 5, as well as the interpretation of DNR orders that included selective treatments (i.e., no pressors, no Bipap, no dialysis). These inconsistencies illustrate a potential disconnect between the understanding of code status and treatment intensity that may result in unintended disparities in patient care. O'Brien et al. (2018) stressed the need for a comprehensive treatment plan to address the care provided to a patient with a DNR. Park et al. (2011) reported that very few of the nurses in their study change care practices for patients who had a DNR order and also noted that a majority of those nurses (75.4%) had experienced ethical education in the year prior to their study.

Pettersson et al.'s (2018) reflection study interviews regarding competence in DNR decisions confirmed the need to improve ethical competence. This would involve enhancing knowledge of ethical concepts and clinical guidelines related to code status, developing relevant behaviors, and exercising and acting on ethical judgment. Although 78% of the sample took a past ethics course, the study findings identified the need for specific training for the care of a patient with a DNR order. Similar findings were reported in other international studies (Beckstrand et al, 2021; Park et al., 2011). Incongruent results in this study can become the agenda items for discussion, education, and in-services.

Study limitations include that this was a baseline snapshot, a convenience sample at one medical center. In addition, survey questions regarding care included critical care skills that may not have been applicable to the medical-surgical nurse. The study was completed in the middle of the COVID-19 pandemic, which made it difficult to personally advertise the study, and meetings to discuss opportunities to

participate in the study were canceled. Participants may have been influenced by the pandemic environment on how questions were answered.

CONCLUSION

The findings from this study could have implications for improving nursing care for patients with DNR orders. Further explanation is needed to understand better why nurses who state they understand the distinction between DNR and do not treat still limit treatment for patients with DNR orders. Additional research is needed to understand the actual treatment practices and their relationship to the patient's condition, treatment preferences, medical recommendations, and nurse beliefs. Additional research can inform the development of education and policy or practice guidelines. Forthcoming educational efforts will address the incongruencies in this study, aiding the overall goal of optimizing appropriate and consistent DNR nursing care.

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