

REVERSING THE STOP SIGNS TO PROACTIVE
NURSING CARE IN DNR PATIENTS

by

Natalie Volpe

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Abstract

Research has supported that patients with a do-not-resuscitate (DNR) code status receive less aggressive treatment and have higher mortality rates compared to those without DNR orders, after adjusting for confounding factors (Cohn, Fritz, Frankau, Laroche, & Fuld, 2012). Health care providers erroneously understand DNR status to imply that a patient is dying and should not undergo other life-saving interventions (Hewitt & Marco, 2004). Surveyed critical care nurses revealed that they believed that interventions such as complete history and physicals, checking vital signs, monitoring neuro status, and ICU admission should not be performed as regular interventions on patients with a DNR status (Sherman & Branum, 1995). The purpose of this paper was to explore the factors that contribute to less aggressive nursing care in DNR patients that are not actively dying from a terminal illness. This study employed a qualitative approach using semi-structured interviews. The sample consisted of five critical care registered nurses. Three common themes were revealed: the definition of DNR code status; interpersonal relationships between nurse/patient; and personal views and feelings directing nursing care. Recommendations and implications for practice are discussed.

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Reversing the Stop Sign to Proactive Care of Patients with Do-Not-Resuscitate Status

Background/Statement of the Problem

Research has supported that patients with a do-not-resuscitate (DNR) code status receive less aggressive treatment and have higher mortality rates compared to those without DNR orders, after adjusting for confounding factors (Cohn, Fritz, Frankau, Laroche, & Fuld, 2012). Most healthcare workers believe in having DNR orders and that in many cases DNR is appropriate to safe guard patients from further harm and in obvious futile cases (Hewitt & Marco, 2004). However, many health care providers erroneously understand DNR status to imply that a patient is dying and should not undergo other life-saving interventions (Hewitt & Marco). A survey of critical care nurses revealed that they believed that interventions such as complete history and physicals, checking vital signs, monitoring neuro status, and ICU admission should not be performed as regular interventions on patients with a DNR status (Sherman & Branum, 1995). They also responded they would be less likely to notify physicians of changes in urine output, hypotension, pupil size and reactivity in patients with a DNR order, which could result in a prolonged period with disturbed function of vital organs and affect the prognosis and lifespan of the patient.

As early as 1914, a New York judge's ruling in a case entitled *Schoendorff vs. Society of New York Hospital* established the principal that competent adult human beings should be allowed to determine what should be done to their own bodies ("Schoendorff vs. Society of New York Hospital," 1914). The Patient's Bill of Rights adopted by the American Hospital Association in 1973 and the Patient Self-Determination Act (PSDA) of 1991 ensure that a competent patient has the right to refuse medical care and that the refusal of certain treatments should have no impact on receiving other therapeutic medical treatments (Lark & Gatti, 1999).

In 1974, the American Medical Association (AMA) was the first professional organization to propose formal documentation of DNR orders in progress notes (Burns, Edwards, Johnson, Cassem, & Truog, 2003). In 1976, two Boston hospitals announced written hospital policies implementing DNR orders. Since the early 1970s, no three words or three letters have led to more controversy and differences in interpretation than DNR orders (Burns et al.). Making the order even more misinterpreted is the fact that each of the 50 United States has different policies and procedures regarding DNR orders (Burns et al.).

Due to continued misinterpretation and confusion surrounding DNR orders, the American Nurses Association (ANA) released an updated position statement in March of 2012 regarding the topic ("Nursing Care and DNR," 2012). The ANA takes the stance that nurses have the duty to advocate for and play an active role in initiating conversations regarding DNR status with patients and families. The ANA recognized that current literature reveals a DNR order may preclude sub-optimal care. Further, good end of life care should focus more on what nursing treatments are provided rather than what patients choose to forgo. The statement advocated for nurses to receive education on what type of care patients with a DNR order should receive, as DNR does not mean, "do not treat". Focusing on patient goals of care during discussions regarding their code status is needed. The ANA statement implores nurses to be involved and play an active role in developing DNR policies within their places of employment. In the event that a nurse cannot fulfill the duty to a patient with a DNR code status, it is suggested that the nurse defer care of the patient to another competent nurse ("Nursing Care and DNR").

The purpose of this paper was to explore the factors that contribute to less aggressive nursing care in DNR patients that are not actively dying from a terminal illness.

Literature Review

A review of the literature was performed using Pub Med, CINAHL and OVID. Search terms included: resuscitation orders and quality of healthcare or nursing care; nursing care and resuscitation orders; and nursing care and quality of care. Literature from the last 20 years was searched.

Definition of Key Terms

Since its inception, DNR orders have been meant to safeguard patients' wishes regarding cardiopulmonary resuscitation (CPR) (Fritz, Fuld, Haydock, & Palmer, 2010). However, studies have shown that healthcare workers have misinterpreted DNR orders to mean more than no CPR in the event of cardiac arrest. The result is less aggressive medical care being delivered to patients with the DNR order as compared to patients

without the order (Cohn et al., 2012). This reference was used in the first paragraph with listing of all authors.

In March of 1992, the AMA issued a report entitled *Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders*. Do-Not-Resuscitate orders were identified as reflecting desires of the patients' right to refuse CPR only and that all other medically appropriate interventions such as pharmacologic circulatory support and antibiotics should not be withheld unless they also are specifically refused ("Opinion 2.2," 1992). Medline Plus, a service of the U.S. National Library of Medicine, the National Institutes of Health, defined the DNR order as a medical order written by a doctor instructing healthcare providers not to do CPR if breathing stops or the heart stops beating (Do Not Resuscitate Orders, 2012). Further, resuscitation is defined as CPR that may involve mouth-to-mouth breathing, pressing on the chest, electric shock, breathing tubes to establish an airway, and medicines.

Four guiding principles that provide the backdrop for clinical decision-making surrounding DNR orders are autonomy, beneficence, nonmaleficence, and justice (Darr, 2005). Autonomy is a principle that speaks to the patients' right to be self-governing, to choose and pursue medical treatment based on their wishes through consent for treatment. Healthcare professionals have an obligation to respect decisions surrounding patients' choices regarding DNR orders. The clinical team must provide the patient with informed consent, which includes: giving the patient all the facts regarding their health status with risks and benefits; truth telling, or being honest with the patient regarding their health; confidentiality, which involves not sharing facts of the patients health status with those unwanted by to patient; and fidelity, doing one's duty or keeping ones word to do what they have promised to do (Darr). Beneficence is a principle that suggests duty that requires refraining the healthcare provider from actions that aggravate a problem or cause other negative results. Beneficence is providing benefits while balancing both

benefits and harms. Beneficence requires providers to do all they can do to aid patients and has also been described as acting with charity and kindness (Darr). Nonmaleficence, or *primum non-nocere*, is a Latin phrase meaning, “First, do not harm”. The principle states that healthcare providers should act in ways that do not inflict evil or cause harm to others. Further, healthcare providers should not cause avoidable or intentional harm to the patients they are caring for. This principle can be violated by knowingly or unknowingly causing harm. The harm can very much be in the eye of the beholder (Darr). Justice implies that burdens and benefits to treatments must be distributed equally to among all persons. When evaluating justice, the healthcare provider must consider fair distribution of scarce resources, competing needs, rights and obligations, and potential conflicts with established legislation. This principle also requires providers to treat patients in a non-prejudicial manner (Darr).

Research related to DNR status and Care Provision

Henneman, Baird, Bellamy, Faber, and Ove (1994) conducted a quasi-experimental simulation study using case studies to compare nurses’ attitudes about standards of care for critically ill patients with and without DNR orders. The case studies were identical for all but one line that read, “The patient has an order of DNR”. Respondents consisted of a sample size of 80 critical care nurses who were surveyed during a monthly staff meeting. Forty of the nurses received the DNR case study and 40 nurses received the non-DNR case study. Nurses reported they would be significantly less likely to perform various physical monitoring interventions on patients with DNR orders. Participants responded to a survey that utilized a 5-point Likert scale (1=very likely; 5=not at all likely). Specific results included: notify physician of hypotension (mean of 2.10 with DNR vs. mean of 1.25 without DNR); monitor every 15-min blood pressure (mean of 1.63 with DNR vs. mean of 1.03 without DNR); obtain ABG (mean of 2.33 with DNR vs. mean of 1.33 without DNR); notify physician of low urinary output

(mean of 1.88 with DNR vs. mean of 1.15 without DNR); notify physician of change in pupil size and reactivity (mean of 1.60 with DNR vs. mean of 1.20 without DNR). When compared to non DNR patients, nurses reported they would less likely to monitor and report changes in blood pressure, arterial blood gases (ABG), decreases in urinary output, hypotension, and change in pupil size and reactivity in DNR patients. These findings were reported despite that fact that the nurses knew the medical team was managing the patient aggressively. The authors surmised that no three words or three letters could adequately represent the unique plan of care that each patient deserves. The authors noted that although DNR is clearly defined in the literature to apply to CPR, it is often used in the clinical setting to describe a wide array of management modalities (Henneman et al).

Sherman and Branum (1995) conducted a similar study using the same case study as Henneman et al (1994). The case studies were presented to all staff nurses (n = 77) in ICUs in a large metropolitan teaching hospital. Pilot testing was done on the vignette and analyses of the findings were done using ANOVA. Nurses were significantly less likely to frequently check vital signs ($p= 0.0071$), perform complete nursing assessments ($p=0.0179$), monitor neurologic status (0.0082) and draw blood cultures (0.0094) on patients with a DNR code status.

Nursing care is not the only care that is potentially diminished in this patient population. Chen, Sosnov, Lessard, and Goldberg (2008) performed a retrospective chart review assessing core measures of care for heart failure patients. One of the main objectives of the study was to examine the impact of DNR orders on hospitalized heart failure patients. The authors hoped to determine if a relationship existed between the DNR order and number of quality measures of care received as compared to non-DNR patients. Although core measures across the board were low, patients with DNR orders received markedly lower quality measures of care: less renin-angiotensin blockers (49% vs 57%); less anticoagulation (65% vs 78%); less monitoring of left ventricular function

(31% vs 43%); and less non-pharmacological interventions such as diet consultation and education on fluid restriction (87% vs 92%).

Data of non-DNR and DNR was compared using logistic regression modeling controlling for confounding factors. A secondary analysis using a propensity score analysis was used. Of 4,537 patient's hospitalized from 1995-2000, 30% of the patients had a DNR order. Patients with the DNR order were less likely (adjusted hazard ratio 0.63, 95% confidence interval 0.40-0.99) to receive any quality performance measures after equating for confounding co-morbidities. Limitations of this study included no documentation of individual patient goals of care and if the patients were asked if they wanted to receive or not to receive one or any of the quality measures of care for heart failure. The authors recommended more comprehensive discussions with emphasis on patient preferences and diagnosis severity.

In 2009, a retrospective chart review was performed at a large New York hospital to assess if admission rates to a medical intensive care unit (MICU) were impacted by the presence of a DNR order (Cohen, Lisker, Eichorn, Multz, & Siver, 2009). The authors hypothesized that MICU admission would not be affected by the presence of a DNR order. However, do-not-resuscitate status negatively impacted the rate of admission to the MICU. With a 95% confidence interval, results showed that 53% of 179 patients were not admitted to the MICU and the only independent variable that demonstrated a difference was the presence of a DNR order. Other independent variables included age, severity of illness, and functional status. Limitations of the study included the fact that there were a limited number of physicians making the decision about ICU admission.

In 2012, a landmark study was performed that examined DNR orders implemented within 24 hours of admission to the hospital after an out-of-hospital cardiac arrest (OHCA) (Richardson, Zive, Daya, & Newgard, 2012). The authors also explored the effects of DNR orders on patient care, procedures performed and in hospital survival.

The OHCA study included 332 acute care hospitals in California. Over 5,000 charts were retrospectively reviewed using California's statewide database of hospital admissions from 2002-2010. The primary variable examined was the presence of a DNR order documented within 24 hours of admission. Frequency counts and descriptive statistics were used to compare the two groups with and without an early DNR order. Chi-square tests were used to compare the frequencies and outcomes of the groups. Odds were recalculated for age and comorbidities. With a 95% confidence rating, results showed patients with DNR status were less likely to undergo potentially critical therapeutic options such as cardiac catheterization or stenting (1.1% vs. 4.3%), ICD/pacemaker placement (0.1% vs. 1.1%), and blood transfusion (7.6% vs. 11.2%) after resuscitation from cardiac arrest. Furthermore, the placement of an early DNR order was associated with less aggressive hospital care. Confounding the issue was the fact that post-OHCA prognostication is not accurate until at least 72 hours after resuscitation. A limitation to this study was the fact that reasons for the DNR order were not documented in the charts with the order.

Two studies examined and compared doctors' and nurses' perceptions of care of patients with a Do-Not- Attempt Resuscitation (DNAR) order. One study sampled adults and one included pediatric patients. Fritz et al. (2010) conducted a study in the UK that surveyed 50 physicians and 35 nurses to elicit patient care that doctors believed "should" take place, what occurred in practice, and what nurses stated does occur in practice in relation to adult patients with DNAR orders. An anonymous written questionnaire was used and data was analyzed using SPSS software. The authors found that 70% of doctors (n= 50) believed adult patients with a DNAR order received less nursing observation while 90% (n=50) believed nurses contacted them with deleterious changes less often in DNAR patients. The authors feared that doctors may be less likely to implement a DNR order due to the fact they believed that their patients would receive less nursing

observation. In contrast, of the doctors surveyed (n=50), 44% of them believed patients with a DNR should have reduced referral to outreach and medical teams. Nurses reported that they were less likely to reach out to doctors (16/35; 45.7%) and less likely to frequently observe DNAR patients (15/35; 42.8%).

The second study by Sanderson, Zurakowski, and Wolfe (2013) involved a web-based self-report questionnaire. This study was a part of a larger study exploring clinicians' attitudes regarding the meaning of a DNR order and the implications on care of pediatric patients. Clinicians who participated were doctors and nurses from a medical intensive care unit (ICU) and cardiac ICU who worked as hospitalists, bedside nurses and advanced practice nurses. The survey was conducted using SurveyMonkey.com and included 148 items. The key concepts addressed in the survey included meaning of the order, implications of the order, timing, attention from the clinical team, barriers to DNR discussion, and training of clinicians regarding what DNR means and how to initiate DNR discussions. Statistical tests were performed using SPSS software. Of the respondents, 107 were doctors and 159 were nurses. Over 30% of total respondents (n=266) revealed they believed DNR orders limited more than just CPR. About 69% of the total respondents (n=266) believed care of patients was negatively impacted once the order was written and resulted in less aggressive care. In contrast, 97% of the respondents (n=266) reported they did not believe that they gave up on patient care once the DNR order was written; 80% felt that late timing of the DNR order was due to lack of discussion being initiated. The authors found that practices were not always consistent with regard to the DNR order and that DNR orders did not adequately address the goals of care. DNR orders were often implemented too late in care. The findings suggested that the problem of less aggressive care has no age boundaries and also lends to the question of timing of DNR implementation as discussed in the Richardson study.

Another study reported similar findings. Cohn et al. (2012) conducted a qualitative study that employed interviews and observation methods. A non-medical field assistant was used to obtain observation data with a non-bias perspective. Respondents consisted of 13 doctors and 14 nursing staff working on two acute care wards in a mid-size hospital. Transcripts and field data were analyzed using NVivo 8.0 to identify emergent themes. Five key themes were identified: design and use; decision making; how the form affected care; concern over “inappropriate” resuscitation; having DNAR discussions with patients/relatives. Related to the theme ‘design and use’, findings revealed that those with DNAR orders were not necessarily about to die and there were misinterpretations related to currently used order forms. The theme ‘decision making’ related to an identified lack of personal responsibility of the healthcare team toward duty to patients and also that patients received fewer treatments. Most clinicians identified DNAR as having a negative impact on care, which was captured in the theme ‘how the form affected care’. DNAR orders were often meant to mean more than a restriction on CPR, as reflected by the theme: ‘concern over “inappropriate” resuscitation’. Patients and relatives felt dissatisfied at the clumsy way that the subject of DNAR orders were brought up to them by the medical team; this was labeled as the theme ‘having DNAR discussions with patients/relatives’. Overall the authors of this study concluded that there were associated unintended clinical repercussions that permeate other aspects of practice and care of patients with a DNR order. DNAR orders can act as an unofficial stop sign to aggressive care. They also concluded that clinicians see the order of DNAR and that it acts as a stop sign for future treatments and interventions.

In summary, common themes and findings were identified through this literature review. These include: misinterpretations of the meaning of DNR status; clinicians’ failure to define patients overall goals of care surrounding the order and their

diagnosis; the negative impact of the order on aggressive care both from doctors and nurses; the negative effect of delay in timing of implementation of the DNR order; difficulty of discussions for clinicians; lack of education of healthcare workers surrounding the care of DNR patients; and what the order means for each individual patient. Previous studies suggest evidence does not exist to explain why nurses may be less aggressive with care (Cohn et al.).

Next, the theoretical framework that guided this study will be presented.

Theoretical Framework

The framework chosen for this study is the Middle Range Theory of Goal Attainment, by Imogene King. In 1981, Imogene King developed the Middle Range Theory of Goal Attainment, which stemmed from her existing interacting systems framework (Tomey & Alligood, 2006). The interacting systems framework includes a personal system, an interpersonal system, and a social system. The Theory of Goal Attainment focuses on the personal and interpersonal systems involving the nurse-client relationship. This theory was developed through King's desire to answer the question "What is the nature of nursing?" (Tomey & Alligood). The answer then guided the development of this theory. King's answer was that the nature of nursing is the way nurses perform their role with and for individuals and that is what differentiates nursing from other health professionals (Tomey & Alligood).

Nursing paradigms used by King to formulate this theory include defining the meaning of human beings, health, environment, and nursing ("Imogene King's Theory of Goal Attainment," 2012). Human beings are defined as social beings who are rational and sentient with the ability to perceive, think, feel, choose, set goals, select means to achieve goals and make a decision ("Imogene King's Theory of Goal Attainment"). Humans have a fundamental need for care and seek to prevent illness. Health is defined as a dynamic life experiences with continues adjustment to external and internal stimuli. King believes the environment consists of two entities, the internal environment and the external environment. She also emphasizes the environment as the background for human interactions. King defines nursing as "a process of action, reaction and interaction by which nurse and client share information about their perception in a nursing situation" and "a process of human interactions between nurse and client whereby each perceives the other and the situation, and through communication, they set goals, explore means, and agree on means to achieve goals" ("Imogene King's Theory of Goal Attainment

2012”, p. 2). King’s theory defines the goals of nurses as “to help individuals to maintain their health so they can function in their roles” (Tomey & Alligood, 2006, p. 303). Nurses have a further obligation to promote, maintain, and restore health in the sick, injured and dying (“Imogene King’s Theory of Goal Attainment”, 2012). These paradigms interact and have input into individuals ability to attain their goals.

Defining the above paradigms led to the development of basic assumptions of her theory. These include the assumption that nursing is a focus of care of the human being with the nursing goal aimed at the health care of individuals and groups (“Imogene King’s Theory of Goal Attainment”, 2012). Another assumption the theory includes the focus of nursing, which is on human beings interacting with their environment, which leads them to a state of health. She believes human beings are open systems interacting constantly with their environment. Also, if the nurse-client relationship includes communication, which sets mutual goals, and those mutual goals are acted on, the client will attain self-actualization through goal attainment (“Imogene King’s Theory of Goal Attainment”, 2012).

The process of communication and interactions, leading to goal attainment, between nurse and client led King to develop a model of transactions (Tomey & Alligood, 2006). The model includes action, judgment, perception, reaction, interaction, and transaction. This model of communication asserts eight propositions are involved in goal attainment.

Propositions of King’s theory include:

- If perceptual interaction accuracy is present in nurse-client interactions, transactions will occur.
- If nurse and client make transaction, goal will be attained
- If goals are attained, satisfactions will occur

- If goals are attained, effective nursing care will occur
- If transactions are made in nurse-client interactions, growth and development will be enhanced
- If role expectations and role performance as perceived by nurse and client are congruent, transactions will occur
- If role conflict is experienced by nurse or client or both, stress in nurse-client interaction will occur
- If nurse with special knowledge and skill communicate appropriate information to client, mutual goal setting and goal attainment will occur (Tomey & Alligood, 2006)

Factors that affect the attainment of goals are stress, roles and space and time (“Imogene King’s Theory of Goal Attainment”, 2012). King’s Theory of Goal Attainment focuses on an interpersonal system between nurse and client. When there is breakdown in the nurse-client relationship problems arise. An area of concern for King was discussion of advanced directives by nurses with patients.

Using her conceptual system of interacting systems, transaction process model and theory of goal attainment, King developed an Advance Directive Decision-Making Model (ADDM) to address the concern. Her concern grew out of research that has shown nurses may be educationally unprepared, may experience conflicts between beliefs and actions, or may resist the responsibility to address end of life issues (Goodwin, Kiehl, & Peterson, 2002). The ADDM model can assist in achieving mutual goal attainment by placing the nurse as a facilitator not an enforcer of decision making, treating the patient as a holistic entity, having continuous flow of communication between nurse and client, allowing the communication to be a two-way conversation that considers non-verbal cues, and allowing the decisions to be client controlled with alternative choices (Goodwin

et al). The ADDM model is a perfect example of how King's theory of goal attainment can guide nurses to help patients make choices that are centered around their goals.

This theory of goal attainment lays a foundation to address the study purpose. This theory has assisted in formulating interview questions geared at finding where the breakdown is within the nurse-client relationship when pertaining to goals of care centered on DNR orders. King asserted that all individuals should be respected as human beings of equal worth and who have their own set of value. Incongruities may exist between the goals of health care givers and recipients based on differing individual values, but individuals have the right to either accept or reject any aspect of health care (Imogene King's theory of goal attainment, 2012).

Next, the study methods will be presented.

Methodology

Purpose

The purpose of this study was to explore the factors that contribute to less aggressive nursing care in DNR patients that are not actively dying from a terminal illness.

Design

This study employed a qualitative approach using semi-structured interviews.

Sample and site

The sample consisted of five critical care registered nurses. All participants were nurses from the hospitals float pool; the float pool was chosen based on float nurses' vast exposure to all care areas, critical and non-critical care areas of the hospital. Exclusion criteria consisted of non-float pool nurses only. The study took place at an acute care hospital in New England. .

Procedures

First, IRB approval was obtained from the hospital IRB and the Rhode Island College (RIC) IRB. Participants were recruited by posting an IRB approved flyer (Appendix A) near the time clock where float nurses punch in. There was an opportunity for each participant to be included in a random drawing for a \$25 gift card. Interested participants were encouraged to email the student researcher to set up an appointment for the interview. Once contacted by email, this researcher, via email, reviewed the process, procedures, set up an appointment, and sent a reminder email confirming the appointment prior to the scheduled date.

Interviews took place in a private conference room. At the time of the interview, the researcher reviewed the IRB approved informational letter (Appendix B) with potential participants and addressed any questions. Then a basic demographic survey was provided to each interviewee (Appendix C).

Once the demographic survey was completed and collected, a semi-structured interview took place (Appendix D). The questions were asked and answered with clarification that the participant was fully finished answering before moving on to the next question. Clarifications of responses were made at time of interview if needed by repeating the response to the participant and asking the participant if what had been repeated was accurate. Key words were recorded during the interview on a printed copy of the interview questions and reflective journaling took place by this writer immediately after the interviews. No identifiers were included on the interview form.

Measurement

Demographic questions that were surveyed include age; years of nursing experience; level of education.

The questions for the semi-structured interview (Appendix D) were constructed from similar questions used in another study (Saran, 2014). The questions were tailored slightly to address the purpose of this study. The questions were piloted with one to two

nurses working on the cardiothoracic intensive care unit in order to evaluate the clarity of the questions. There were no changes made as a result of the pilot.

Data Analysis

Descriptive statistics were used to analyze the demographic responses. Reflective journal notes taken during the interview were reviewed for commonalties. Commonalties were given labels that became the initial coding scheme. Codes were then sorted into categories that were related. Categories were used to organize and group codes into meaningful clusters. The clusters were used to form subcategories. Next definitions for each category were developed. Exemplars for each code and category were identified. Relevant theories were then derived and ultimately became the findings of this study.

Next,

Results

Five interviews were conducted. Of the five participants, four were associate degree nurses and one nurse held a diploma. Length of nursing experience included three nurses with 11-20 years of experience and two nurses with 6-10 years of nursing experience. Three of the nurses were in the age category of 21-39 and two nurses were in the 40-59-age range.

This study revealed three common themes: the definition of DNR code status; interpersonal relationships between nurse/patient; and personal views and feelings directing nursing care. Themes and illustrative examples of participants' responses are illustrated in Tables 1-3.

Table 1

Theme 1: Definition of DNR

THEME	SUPPORTING COMMENTS
Definition of DNR	<p>“End of life”</p> <p>“Comfort measures only”</p> <p>“Ending the progression of illness”</p> <p>“I see confusion with what the order means, some nurses think it means you do not have to monitor and they do not receive treatments like blood or antibiotics.”</p> <p>“Nurses do not understand why we treat, why on tele, they do not understand the order definition.”</p>

Related to the first theme, definition of DNR, two of the participants equated DNR orders to mean comfort measures only, while three of the five participants described “other” nurses equating a DNR order in that way. Participants identified nurses

misunderstanding the order of DNR to mean that the patient should be monitored less in terms of vital signs and assessments. Also, participants identified less time being spent with the DNR patient, with time focused more on those with non-DNR status.

Respondents believed that the level of care received by DNR patients was dependent on the nurse and the nurses' understanding of what the order means.

Table 2 below illustrates the second theme.

Table 2

Theme 2: Interpersonal relationship between nurse/patient

THEME	SUPPORTING COMMENTS
Interpersonal relationship between nurse/patient	<p>“Continuity of care, without the relationship, without the bond forming, they just see patient as DNR and don’t give complete care”.</p> <p>“Nurses prioritize patients’ based on DNR status, I personally see the non-DNR’s first and spend less time with my DNR patients”.</p> <p>“During handoff you are told not to worry out that patient, they are DNR or this is any easy one...DNR, don’t have to do anything”</p> <p>“No focus on what they do want”</p> <p>“Nurses don’t feel comfortable having those conversations, think it’s the doctors job”</p>

The second theme related to participants’ described failure to develop a nurse/patient relationship with patients with a DNR order. They saw this as contributing to the avoidance of discussions with patients about the goals of care from the patient perspective. Participants responded that nurses do not feel comfortable having conversations surrounding the DNR order and believed it to be the responsibility of the doctor. Responses revealed a lack of focus on what the patient wanted, with the focus

entirely on the DNR order. The patient was seen as “DNR” which was viewed as prohibiting a focus on goals of care. These patients were identified as being prioritized last in the nurses’ assignment.

Table 3 on the next page illustrates the final theme, nurses’ personal views and feelings regarding patients with a DNR order. Participants identified that in their experience ICU nurses believed that DNR patients do not belong on an ICU because “we are not going to fix them” and “they don’t want to be saved, we save people”. Nurses own feelings provide a barrier to care of patients with a DNR order. Respondents revealed nurses feel less personal responsibility towards DNR patients. One respondent added that nurses feel “covered” if something bad happens and DNR patients are monitored less by way of vital signs and urine output, while alarms are ignored or turned off.

Table 3

Theme 3: Personal views or feelings directing nursing care

THEME	SUPPORTING COMMENTS
Personal views or feelings directing nursing care	<p>“ICU nurses ask why are they here, they do not want to be fixed.”</p> <p>“Nurses go by their own feelings, think they do not want to be saved, so they monitor them less.”</p> <p>“I’ve seen nurses shut alarms off and give less care, they think that’s acceptable with DNR patients.”</p>

	<p>“Nurses feel less responsibility...don’t answer alarms”</p> <p>“I think there is a general feeling that DNR means you’re not going to do anything to fix them so why bother...monitor less, non-DNR you do everything soup to nuts.”</p> <p>“Some nurses don’t want DNR patients in ICU because “we save lives.”</p> <p>“DNR diminishes care, same patients without a DNR will be treated differently, I don’t, but I see it all the time.”</p> <p>“I personally feel covered if something bad happens to my DNR patient.”</p> <p>“I have seen other nurses neglect, like no big deal, not as concerned.”</p>
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Next, summary and conclusions will be presented.

Summary and Conclusions

Research has supported that patients with a do-not-resuscitate (DNR) code status receive less aggressive treatment and have higher mortality rates compared to those without DNR orders, after adjusting for confounding factors (Cohn et al., 2012). Most healthcare workers believe in having DNR orders and that in many cases DNR is appropriate to safeguard patients from further harm and in obvious futile cases (Hewitt & Marco, 2004). However, many health care providers erroneously understand DNR status to imply that a patient is dying and should not undergo other life-saving interventions (Hewitt & Marco). The purpose of this paper was to explore the factors that contribute to less aggressive nursing care in DNR patients who are not actively dying from a terminal illness.

The framework chosen to guide this study was the middle range Theory of Goal Attainment by Imogene King. The Theory of Goal Attainment focuses on the personal and interpersonal systems involving the nurse-client relationship. This theory of goal attainment provided a foundation to address the study purpose. King asserted that all individuals should be respected as human beings of equal worth and who have their own set of value. Incongruities may exist between the goals of health care givers and recipients based on differing individual values, but individuals have the right to either accept or reject any aspect of health care. This theory assisted in formulating interview questions geared at finding where the breakdown is within the nurse-client relationship when pertaining to goals of care centered on DNR orders.

This study employed a qualitative approach using semi-structured interviews. The sample consisted of five critical care registered nurses. All participants were nurses from a critical care float pool; the float pool was chosen based on float nurses' vast exposure to all care areas, critical and non-critical care areas of the hospital. Exclusion criteria consisted of non-float pool nurses only. The study took place at a 719-bed acute care hospital in the Northeast. IRB approval was obtained from the hospital and the RIC IRBs. At the time of the interview, the researcher reviewed the IRB approved informational letter with potential participants and addressed any questions. Then a basic demographic survey was provided to each interviewee (Appendix C). Once the demographic survey was complete and collected, a semi-structured interview took place (Appendix D).

Though this was a small pilot project, some insight into why less aggressive nursing care may be provided in DNR was gleaned. Nurses may not have accurate knowledge related to what a DNR order actually means, which is consistent with the literature. Nurses in this study misconstrued the DNR order to mean less treatment is provided to those patients and less monitoring is expected and acceptable. Nurses own feelings

provide a barrier to care of patients with a DNR order. Nurses appeared to allow personal feelings and attitudes about DNR status to influence the decision making process to monitor and seek medical treatment less for this patient population less. This finding aligned with literature findings that patients with a DNR order are monitored less and receive less aggressive nursing care. Without a formed nurse/patient relationship there may be less communication and focus on what the goals of the patient are surrounding their illness. Advocacy for the patient may be diminished when there is not an established relationship. Limitations of this study included the fact that all participants had an associates degree or diploma; participants with higher levels of education may have yielded different perspectives. Another limitation may have been the length of experience of the participant it may have been insightful to examine the perspective of nurses with less extensive clinical experience. The small sample size is acknowledged as a limitation to this study. Further study with a larger sample and a more diverse sample is indicated; this study did not examine the impact of demographics on nurses' beliefs about DNR status. Further study of select demographic variables, including ethnicity and age, would be valuable.

In conclusion, the three emerging themes provided insight into why DNR patients may receive less aggressive nursing care. Nurses misunderstanding of the definition of DNR, lack of an interpersonal nurse/patient relationship, and nurses using their personal views and feelings to guide treatment practices were identified as contributing factors to less aggressive care is given to DNR patients vs. non-DNR patients not actively dying from a terminal illness.

Next, recommendations and implications for advanced practice nursing will be discussed.

Recommendations and Implications for Advanced Practice Nursing

Clear delineation of DNR and comfort measures only is needed and all healthcare providers need to understand that DNR orders do not mean do not treat. An important component involves further education of nurses and other healthcare providers in relation to the definition of DNR code status and what the implications for patient care are. Education could be provided during yearly credentialing sessions and reinforced by unit champions and must include the role the nurse is expected to assume in caring for patients with a DNR order. Designating a unit champion, a nurse who has received training on hospital policies surrounding the order, would be helpful. Responsibilities would include discussing goals of care and training on how to approach patients regarding the topic; this would help to ensure what the patient does want is reflected in end-of-life decision making, including DNR status. Training must include the need for unbiased advocacy and open and on-going communication to ascertain that the patient's goals of care are met. If nurses do not feel comfortable having conversations with patients surrounding the topic of DNR, the responsibility should be shifted to a nurse that does ("Nursing care and DNR", 2012). Through education and role modeling of expected behavior, the culture of complacency can potentially be changed. If nurses are properly educated on what the order means, attitudes may change in regard to DNR. This training needs to include advanced practice nurses.

Advanced practice registered nurses (APRN) are in a position to act as role models and change agents to improve the care of this patient population. Advanced practice nurses have the ability to impact nursing care practice through education, policy change, and role modeling to nurses and other team members. They have the potential to become the ultimate change agent for improving care of patients with a DNR order. Having

nurses present during the conversations that APRNs skilled in this area have surrounding DNR status would be beneficial. These encounters could also role model the establishment of a relationship, active listening, and how to and inquire about the patient's goals of care. Advanced practice nurses can empower nurses and other team members to advocate for patients and provide guidance surrounding the order itself.

The APRN is in a unique position to be at the center of policy change. The APRN has the knowledge and skills required to use evidence based practice to implement policy change related to DNR status. The need for organizational support, collaborative resources, and education for all providers are critical elements. Change strategies would include enlisting nurses, nurse managers and medical directors in the effort to improve care related to DNR status. Patient and family satisfaction could be improved if patients feel their goals are met. The APRN could be instrumental in changing the DNR policy to include the patients stated goals of care for the current admission, which could be communicated with the statement of "the patient is DNR". Advanced practice nurses could assume leadership roles in changing DNR policy at the state and national levels as well, which would ultimately improve quality of care for patients.

More research is needed in this area. Further study to understand why patients choose to be DNR and what they perceive the order to mean is needed. Much of the research to date has been focused on what is not done for the DNR patient; research focused on DNR patient's goals of care is also needed. This would allow an alignment of ideals between nurse/patient surrounding this topic. Research can be done to assess the effectiveness of education, training, and policy change on health care provider attitudes and behaviors. The APRN is uniquely prepared to carry out this research. The APRN works to enhance the translation, implementation and dissemination of evidenced based research into clinical practice. Further exploration of the factors that contribute to less aggressive nursing care being provided to DNR patient is needed.

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Research Study

Seeking Experiences of Float Pool Nurses

The research topic is care of patients with a DNR code status. You will be asked for no longer than 45 minutes of your time which will include a sit down interview.

Contact: Natalie Volpe RN on CTIC and MSN student

Nvolpe1@lifespan.org or 401-499-2958



Research Protection Office
Office of Research Administration
CORO West, Suite 1.300
One Hoppin Street
Providence, RI 02903
Tel 401 444-6246, Fax 401 444-7960

E. P. Bradley Hospital
Rhode Island Hospital
The Miriam Hospital
Newport Hospital
Gateway Healthcare

DATE: April 24, 2015

TO: Cynthia Padula

FROM: Janice Muratori, MSN, FNP-BC
Director, Research Protection Office

SUBJECT: **HUMAN SUBJECTS PROTECTION - DETERMINATION OF EXEMPT STATUS**
FWA-Rhode Island Hospital (RIH) 00001230, The Miriam Hospital (TMH) 00003538
IRB Registration #: RIH IRB 1 - 00000396, RIH IRB 2 - 00004624, TMH IRB - 00000482

CMTT/PROJ: 201715 45CFR 46.101(b)(2)

TITLE: [652064-1, 652064-2 & 652064-3] Reversing the stop signs to proactive nursing care in patients with DNR status

Your research application submitted on February 3, 2015, was reviewed and determined to be exempt from the Federal Regulation 45 CFR 46 as meeting the criteria in 45 CFR 46.101(b)(2). Projects determined to meet the exempt criteria by the IRB are exempt from continuing review by the IRB, as long as the project maintains the properties that make it exempt.

This means:

1. You do not need to renew your application annually.
2. You do not need to submit a revision application to make changes in your project unless the modification will cause the research to change from Exempt to Expedited or Full Review Status as per 45 CFR 46.

Revisions that may change the status of this determination must be submitted to the IRB for review.

This institution is in compliance with the ICH GCP as they correspond to the FDA/DHHS regulations. This review is applicable for RIH.

Please contact the Research Protection Office if you have any questions.

Appendix C Demographic Survey

This document has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records.

Please fill out the following questions by circling the correct response.

1. Age- 21-39 40-59 over 59
2. Highest level of Nursing Education- Diploma Associates Bachelors Masters
3. Length of Nursing Experience- 0-5yrs 6-10yrs 11-20yrs 21-30yrs
over 30yrs

Appendix D

SEMI-STRUCTURED INTERVIEW GUIDE

1. Tell me in your own words what a DNR order means?
2. Can you identify concerns that have arisen caring for a patient with a DNR order?
3. Is there a particular experience caring for a patient with a DNR order that stands out in your mind (either one that you felt was very positive or one that did not go

well)? Can you tell me what happened-all the details that you can best recall?

Will prompt for a contrasting story, e.g. That sounds like it went very well, have you had a time where things did not go as well?

4. In your experience, does having a DNR order influence the way nurses provide care to patients? If so how? *Probe for further depth and detail; prompt for context if not spontaneously mentioned, e.g. Tell me about your experience with younger patients with DNR designation.*
5. What helps nurses provide high quality care to patients with a DNR order?
6. What barriers exist that may prevent nurses from providing high quality care to patients with a DNR order?
7. *In your experience are conversations surrounding code status discussed with the patients? Eg. Have you probed a patient for what their goals of care were?*
8. *In your experience is there a difference s in how patients with and without a DNR order are cared for by nursing?*