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# An integrative review of Do-Not-Resuscitate decisions in Korea\*

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#### I Introduction

End-of-life (EOL) decisions are often complex and difficult. These decisions may change the focus of intervention from aggressive life-sustaining treatment to measures designed to relieve symptoms and provide comfort. So it is necessary for health care providers to concern with providing care that facilitates the patient's well-being.

In Korea, EOL decisions are made frequently and practically in a clinical setting

and involve ethical and legal issues. Do-Not-Resuscitate (DNR) is the most popular type of EOL decision.<sup>1</sup>) Most health care providers stated they have made DNR decisions in their practice.<sup>2–4</sup>)

Since the landmark case called "Case of the Boramae Hospital"<sup>5)</sup> has brought EOL issues to light in Korea, a proposal has been made to build up a social consensus and guidelines for EOL decision making in Korea. Although EOL decisions habitually have to be made in clinical settings, before the

<sup>\*</sup> A part of this study was presented at the International Nursing Ethics Conference held in Yale University, New Haven, Conneticut, 2008.

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<sup>1)</sup> Kim S. Do-Not-Resuscitate (DNR) decision making in terminal patients, Korean Journal of Nursing Query 1999; 8(2): 10-20.

Chung SP, Yoon CJ, Oh JH, Yoon SY, Chang WJ, Lee HS. A retrospective review of the Do-Not-Resuscite patients. Journal of the Korean Society of Emergency Medicine 1998; 9(2): 271–276.

<sup>3)</sup> Lee SH, Kim JS, Hwang MJ, Hwang BD, Park YJ. Ethical dilemma associated with DNR: The attitude of clinical nurse. Journal of Korean Clinical Nursing Research 1998; 4(1): 147–162.

<sup>4)</sup> Han SS, Han MH, Yong JS, A survey on the medical doctor's concept on DNR (Do-Not-Resuscitate) order. Korean Journal of Medical Ethics Education 2003; http://www.bionest.or.kr/linkfile/1137822682.pdf, Accessed June, 2003.

<sup>5)</sup> In 1997, the wife of a patient who underwent brain surgery at Boramae Hospital asked to stop further treatment due to the financial burden. A doctor allowed the patient to be discharged against medical advice and he died. In 1998, the court proclaimed it was illegal and found both doctor and the wife guilty of homicide.

landmark case, little discussion occurred and few guidelines were provided for health professionals on how such decisions should be made. Understanding phenomena associated with EOL decision making may help nurses get a better sense of how to care for patients and their families during this time.

Integrative review is a research review method through which one can combine both experimental and non-experimental research in order to more fully understand the phenomenon of concern.<sup>6–9)</sup> The purpose of this paper is to outline the research that has been conducted regarding DNR decisions in Korea and to describe the characteristics of DNR decision making in Korea using an integrative review of the literature. This paper may give insight into practice, research, and education regarding EOL decisions across the health care discipline in Korea.

# ${\rm I\hspace{-0.5mm}I}\,.\,\, {\rm Methods}$

As a method, an integrative review was performed to review the published research findings regarding DNR decisions in Korea and to synthesize the findings for future research. The procedure followed five steps suggested in the literature<sup>10,11</sup>: problem identification, literature search, data evaluation, data analysis, and data presentation.

#### 1. Problem Identification

Regarding DNR decisions in Korea, two questions were posed: 1) what are the characteristics of the studies regarding DNR decision in Korea? 2) what are the characteristics of DNR decisions in Korea? Answering these questions may help the health care discipline to promote proper research in the future and improve practice after reflection on current phenomena regarding DNR in Korea.

#### 2. Literature Search

Three Korean biomedical databases including KOREAMED (http://www. koreamed.org), KMBASE (http://kmbase. medric.or.kr), and RICH (http://www.richis. org) were used to search the literature. The key search term was DNR. Inclusion criteria were either original articles or review articles written in Korean and published in Korean journals from 1998 to 2010. Exclusion criteria were unpublished theses or conference proceedings. Other exclusion criteria were articles focused on cultural differences and those with research populations consisting of

<sup>6)</sup> Russell CL. An overview of the integrative research review. Progress in Transplantation 2005 ; 15(1) : 8-13.

<sup>7)</sup> Whittemore R, Knafl K. The integrative review: Updated methodology. Joural of Advanced Nursing 2005 ; 52(5) : 546-553.

<sup>8)</sup> Whittemore R. Combining evidence in nursing research: Methods and Implications. Nursing Research 2005 ; 54(1) : 56-62.

<sup>9)</sup> Beyea SC, Nicoll LH. Writing an integrative review. AORN Journal 1998 ; 67(4) : 877-880.

<sup>10)</sup> Russell CL. op.cit., 2005; 8-13.

<sup>11)</sup> Whittemore R. op. cit., 2005 ; 56-62.

newborns, infants, and children. Twenty published articles written in Korean were retrieved.

## 3. Data Evaluation

During the literature search stage, twenty published papers were retrieved. In the date evaluation stage, the twenty articles were reviewed in terms of the research type (empirical or theoretical), research design, research method, and research population.

# 4. Data Analysis

In the data analysis stage, the twenty articles were analyzed in terms of the research

questions. An analysis of research format (research type, design, method, and population) was performed. Then, the major findings were analyzed based on the research questions in terms of the decision maker, factors influencing DNR decisions, changed practice after DNR decisions, and the attitudes and experiences of the people involved in such decisions.

## 5. Data Presentation

As a last step, the results of the data analysis are presented in <Table 1> and <Table 2>. Detailed findings are described in the Results section based on research objectives.

<Table 1> Summary of studies regarding DNR decision in Korea

Author(s)	Year	Purpose	Type/ Design	Methodology	Samples	Major Findings
Chung, et al.	1998	To assess the current use of DNR orders in the emergency department	Empirical report/ descriptive study	Retrospective review of medical records	164 medical records of patients who died in the emergency room	<ol> <li>1) 62.2% of patients had a DNR order in the ER. 2) 59% of DNRs were written orders in the records.</li> <li>3) The factors influencing DNR decisions were malignancy and age.</li> </ol>
Lee, Kim, Hwang et al.	1998	To describe nurses' ethical attitudes regarding DNR decision making	Empirical report/ descriptive study	Survey using a questionnaire with 21 items	200 nurses working at a tertiary hospital	1) 92% of nurses have experience with DNRs, and 34% have had education regarding ethics during the last year. 2) 81% of respondents agreed to the notion of giving straightforward information about DNRs to the patients or the families. 3) 96.5% of nurses agreed that they should help patients and families to express their feelings after the DNR decision is made.
Kim, S.	1999	To review the literature regarding DNRs	Theoretical report/ descriptive study	Review of the literature	N/A	In Korea, patients' autonomy has been neglected. There is no systemic decision-making principle.

Author(s)	Year	Purpose	Type/ Design	Methodology	Samples	Major Findings
S.S.Han, Chang, Moon et al.	2001	To identify nurses' experience, understanding, and attitudes regarding DNR decision making	Empirical report/ descriptive study	Survey using a questionnaire with 20 items	347 nurses in 8 university affiliated hospitals	1) DNR decisions were most frequently made by agreement between family members and medical staff. 2) The major reasons for the necessity of DNRs were impossible recovery and death with dignity. 3) There were significant differences in the participants' understanding and attitudes toward DNRs depending on their religion, career, education, and experience.
S. S. Han, Han, & Yong	2003	To identify physicians' experience, understanding, and attitudes regarding DNR decision making	Empirical report/ descriptive study	Survey using a questionnaire with 20 items	96 physicians in 2 university affiliated hospitals	1) 69.8% of doctors experienced situations in which DNR decision making occurred. 2) DNRs were most frequently requested by family members (38.5%), by medical staff (27.1%), and patients themselves with advanced directives (7.3%). 3) DNR decisions were most frequently made by agreement between family members and medical staff. 4) Problems after DNRs were negligence in treatment and nursing care and guilt due to not doing their best.
Kang & Yum	2003	To examine the awareness and experience of nurses and physicians regarding DNRs	Empirical report/ descriptive, comparative study	Survey using a revised questionnaire with 29 items developed by Han et al. (2001)	199 nurses and 98 physicians	1) 97.3% of respondents agreed to the necessity of DNRs. 2) 78.8% of respondents have followed DNRs by the demand of the patient's family. 3) There was no significant difference in the perceived necessity of DNRs between nurses and physicians.
Kim, S.	2004	To describe the DNR decision- making process and alterations of interventions after the DNR decision is made	Empirical report/ descriptive study	Interview with health care providers	12 nurses and 8 doctors working at university affiliated hospitals	1) During the DNR decision-making process, the primary decision makers were not patients, but physicians and caregivers. DNR decisions were made in the situation of anticipatory death. 2) Consideration factors were old age, severity of the illness, and financial difficulties. 3) After the decision was made, interventions are less aggressive, causing health care providers to experience moral distress.

Author(s)	Year	Purpose	Type/	Design	Methodology	Samples
Shim, et al.	2004	To define the characteristics of DNR decisions among the patients admitted to hospice	Empirical report/ descriptive study	Retrospective review of medical records	60 medical records of patients admitted to hospice	1) The median age of patients with DNRs was 66. 2) Most people who signed DNR orders were sons. No patients signed DNRs. 3) Half of the patients had DNRs signed on the day of admission to hospice. The rest signed when their symptoms became aggressive.
Kim & Yoo	2005	To identify characteristics of patients who had DNR decisions made within the concept of APACHE III and MOF	Empirical report/ descriptive, comparative study	Retrospective review of medical records	51 medical records of patients who had DNRs	<ol> <li>Men's APACHE III and MOF scores were higher than women's. Non-cancer patients' scores were higher than those of cancer patients.</li> <li>APACHE III and MOF scores positively correlated with each other regarding DNR decision.</li> </ol>
S.S. Han	2005	To examine ethical dilemmas regarding denial of resuscitation by patients	Theoretical report/ descriptive study	Review of the literature	N/A	1) Agreement among people nationwide is essential for appropriate DNR decisions to be made.
S.S. Han, Kim, Ku, et al.	2005	To develop the guidelines for DNRs	Empirical report/ methodologic al research	Delphi technique	An expert panel: 2 physicians and 1 lawyer	1) Various documentary records and a DNR-related database were collected and used as references. 2) The first draft of DNR guidelines was created by researchers. 3) A group of experts reviewed the draft and corrected it with the Delphi method. 4) Ethical and legal guidelines were accepted by the ethical committee.
Park, Koo, & Kim	2006	To analyze and clarify the ambiguous concept of DNR	Theoretical report/ descriptive study	Concept analysis	N/A	1) The definable attributes of DNR were care for comfort, no further treatment, and no CPR. 2) The antecedents of DNR were patients' autonomy and families' feelings about death, the uselessness of treatment, and the right to die with dignity. 3) The process of DNR decision making should be documented. The antecedents of DNR can also be a basis for objective standards of DNR decision making. 4) The result of signing DNRs was the acceptance of death by patients and families.

Author(s)	Year	Purpose	Type/	Design	Methodology	Samples
M. H. Lee & Kang	2007	To investigate the relationship among attitudes toward DNR orders, depression, and self-esteem in the elderly	Empirical report/ descriptive study	Survey using self-administered questionnaires	99 elderly individuals hospitalized in 4 university affiliated hospitals	1) Self-esteem was significantly correlated with attitudes toward DNR orders. 2) Most of the participants showed a positive attitude toward DNR orders. They preferred to make the DNR decision when they were healthy.
Y. B. Lee	2007	To describe and compare the perceptions, experience, and ethical attitudes of nurses and doctors	Empirical report/ descriptive comparative study	Survey using questionnaires with 29 items regarding perceptions of and experience with DNR and 19 items regarding ethical attitudes	doctors	1) The majority of nurses and doctors agreed on the necessity of DNRs. 2) There was a significant difference in ethical attitudes about DNRs depending on occupation, 8 work experience, and age. 3) The most significantly different attitudes between nurses and doctors was the item "it is right for physicians to make DNR decisions when the patient's health status is well known."
Sung, Park, Jung et al.	2007	To identify the awareness of and attitudes toward the ethical dilemma associated with DNR among nurses working in intensive care units	Empirical report/ descriptive study	Survey using questionnaires	159 nurses working in intensive care units	1) Most participants responded that DNRs were necessary. 2) DNR decisions were most frequently made by patients and family members. 3) Most of the respondents perceived the need for standard guidelines for DNR decisions. 4) There were significant differences in participants' awareness of and attitudes toward DNRs depending on religion, educational level, marital status, and clinical experience.
SH. Kim & Kim	2008	To identify the attitudes of primary caregivers who are taking care of critically ill elderly with DNRs	Empirical report/ descriptive study	Survey using questionnaires	132 primary caregivers	1) 56.8% of the primary caregivers have never considered DNR decisions for patients before. After they heard about it from physicians. 68.9% of them could accept it. 2) The most important reason for DNR decisions is to relieve the pair of dying patients. 3) 68.2% of participants responded that they would consider DNRs for themselves for the future.

Author(s)	Year	Purpose	Type/	Design	Methodology	Samples
K. Lee, Jang, Hong et al.	2008	To define the characteristics of DNR decisions among patients who died in a medical intensive care unit	Empirical report/ descriptive study	Retrospective review of medical records	102 medical records of patient for whom DNRs were performed and who died in an intensive care unit	1) 73.5% of the patients had DNR orders. 2) DNR orders were suggested by the physician for 96% of the patients. 3) 84% of the patients with DNRs had received the order within 3 days before death. 4) The withholding of additional therapy or withdrawing of current therapy occurred in 57.3% of the patients.
Song, Kim, & Koh	2008	To describe the factors that influence DNR agreement	Empirical report/ descriptive study	Retrospective review of medical records	213 medical records of patients who died in the hemato-oncology department	1) 85% of patients agreed to a DNR order. 2) DNRs were suggested by attending physicians in 83.9% of cases and by family members in 16.1%. 3) The patients with more frequent admission to the hospital and with higher educational level were more likely to agree to a DNR order. 4) The levels of care after DNR were as follows: withholding of resuscitation only (17.2%), withholding of additional support (73.9%), and active withdrawal of provided support (8.9%).
Yi et al.	2008	To describe nurses' experiences with DNRs	Empirical report/ descriptive study	In-depth interviews	8 nurses in 8 different hospitals	1) Nurses' experiences were summarized using eight themes, such as DNR decision making, bypassing the patient, inefficiency in the DNR decision-making process, least amount of intervention in the decision for DNR, and change of focus in patient care. 2) Often high medical expenses were involved in choosing to sign DNRs. 3) Verbal DNR permission was more popular. 4) Most nurses felt guilty and depressed about the death and dying of patients with DNRs.
You, Jung, Shin et al.	2009	To investigate a rescue party's perceptions of and attitudes about ethical issues regarding DNRs	Empirical report/ descriptive study	Survey using a questionnaire on perception	226 individuals working in a rescue party	1) There were significant differences in the participants' attitudes depending on their personal and professional characteristics.

Characteristics	Sub Content	Numbers	Percentage
Research Type	Empirical report	17	85%
Research Type	Theoretical report	3	15%
Research Design	Descriptive study	16	80%
	Descriptive comparative study	3	15%
	Methodological study	1	5%
Research Methods	Survey using questionnaire	9	45%
	Retrospective review of medical records	5	25%
	Review of the literature	3	15%
	In-depth interviews	2	10%
	Delphi technique	1	5%
Research Population*	Medical records of patients(ER, Oncology, and Hospice)	5	31%
	Nurses	4	25%
	Physicians	1	6%
	Both nurses and physicians	3	19%
	Emergency Medical Technicians	1	6%
	Elderly admitted to the hospital	1	7%
	Primary caregiver of elderly	1	6%

<table 2=""></table>	Characteristics	of Studies re	garding DNR	l in Korea
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N=20

\* Exclude theoretical report and methodological report (N=16)

#### **Ⅲ**. Results

This integrative review focused on the characteristics of research regarding DNR decisions in Korea and the characteristics of DNR decision-making itself in the literature. <Table 1> presents the findings from each study.

# 1. Characteristics of Studies Regarding DNR Decisions in Korea

<Table 2> presents the characteristics of studies regarding DNR decisions. In terms of research type, 85% of studies are empirical reports and 15% are theoretical reports, including literature reviews of DNR decisions in terminal patients,<sup>12</sup>) ethical dilemmas regarding DNR decisions,<sup>13</sup>) and concept analyses of DNR.<sup>14</sup>) Most of the research was designed to be descriptive studies or descriptive comparative studies. Only one study had a methodological design aimed at

12) Kim S. op. cit., 1999 : 10-20.

<sup>13)</sup> Han SS. Ethical issues on DNR (Do Not Resuscitate) by patients with incurable diseases. Korean Journal of Medical Ethics Education 2005; 8(1): 11-20.

<sup>14)</sup> Park HS, Koo MJ, Kim YH. Concept analysis of DNR(Do-Not-Resuscitate). Journal of Korean Academy of Nursing 2006 ; 36(6) :1 055-1064.

making ethical guidelines for DNR decisions.<sup>15)</sup> In terms of method for collecting data, 45% of the research studies used questionnaires and 25% used retrospective reviews of medical records. In terms of research population, 40% of the research studies used nurses, physicians, or both. No studies used a population of patients who had DNRs, except those studies using medical records. As far as the patients themselves, one study described attitudes regarding DNRs using an elderly population admitted to the hospital.<sup>16)</sup> For caregivers, one research study tried to identify the attitudes of primary caregivers of critically ill elderly.<sup>17)</sup>

# 2. Characteristics of DNR Decisions in Korea

According to the retrieved articles, characteristics regarding DNR decision-

making in Korea can be divided into four parts: Who is the decision maker? Which factors influence DNR decisions? What is the result after the DNR decision is made? What are the attitudes and experiences of the people involved?

## 1) Decision maker

In Korea, physicians and family members make DNR decisions. The twenty reviewed studies reported that physicians and family members were the significant decisionmakers, rather than the patients themselves.<sup>18–25)</sup> Only one article showed that patients opted for DNRs based on their personal preferences.<sup>26)</sup> According to MH Han, Han, & Yong (2003), only 7.3% of patients requested DNRs on their own. Nurses are involved indirectly during the decision-making process as counselors for the

<sup>15)</sup> Han SS, Kim J-H, Ku I-H, Hong S-Y, Lee K-S. Development of the guideline to Do Not Resuscitate (DNR) and ethical review. Korean Journal of Medical Ethics Education 2005; 8(2): 116–130.

<sup>16)</sup> Lee MH, Kang HS. The relationship among attitude toward DNR orders, depression and self-esteem in the elderly. Journal of the Korean Gerontological Society 2007; 27(2): 323–334.

<sup>17)</sup> Kim S-H, Kim S-H. The attitudes of primary caregivers of critically ill elderly patients on do-not-resuscitate status. Journal of Korean Geriatiric Society 2008; 12(4): 215-221.

<sup>18)</sup> Han SS, Chang SA, Moon MS, Han MH, Ko GH. Nurses' understanding and attitude toward DNR. Journal of Korean Nursing Administration Academic Society 2001; 7(3): 404–414.

<sup>19)</sup> Han SS, Han, & Yong. op. cit., 2003.

<sup>20)</sup> Kang HI, Yum YH. Awareness and experience of nurses and physicians on DNR. The Journal of Korean Nursing Administration Academic Society 2003; 9(3): 447-458.

<sup>21)</sup> Kim S. op. cit., 1999.

<sup>22)</sup> Kim S. op. cit., 2004.

<sup>23)</sup> Shim BY, Hong SI, Park J–M, et al. DNR (Do-Not-Resuscitate) order for terminal cancer patients at hospice ward. The Korean Journal of Hospice and Palliative Care 2004; 7(2): 232–237.

<sup>24)</sup> Song T, Kim K, Koh Y. Factors determining the establishment of DNR orders in oncologic patients at a university hospital in Korea. The Korean Journal of Internal Medicine 2008 ; 74(4) : 403-410.

<sup>25)</sup> Sung MH, Park JH, Jung KE, Han HR. ICU nurses' awareness and attitudes to the ethical dilemma associated with DNR. Journal of Korean Clinical Nursing Research 2007; 13(3): 109–122.

<sup>26)</sup> Han SS, et al. op. cit., 2003.

family member<sup>27)</sup> or minimally involved in the process of DNR decision-making.<sup>28)</sup> The pattern in the decision-making process shows that DNRs are initially recommended by physicians, followed by agreement from and acceptance by family members.<sup>29)</sup>

2) Considering factors for DNR decisions.

Major factors influencing DNR decisions in Korea are patient characteristics. First, patient characteristics included clinical, social, philosophical, and economic factors. Clinical factors related to DNR decisions were severity of illness, malignancy, and medical futility.<sup>30–34</sup>) Higher APACHE III and MOF scores positively correlated to DNR decisions, indicating that clinical factors do indeed influence DNR decisions34. The most significant social factor in terms of DNR decisions was old age.<sup>35,36</sup>) In terms of philosophical factors, death with dignity or relieving pain for dying patients were the most important for DNR decisions.<sup>37–40</sup>) Financial difficulty was the major economic factor for DNR decisions.<sup>41,42</sup>) Based on interviews with nurses and doctors working at university-affiliated hospitals, Kim (2004) described financial difficulty as one of the considered factors for DNR decision-making. As Yi et al. (2008) pointed out, Korean nurses often reported that family members chose the DNR option in their practice because of high medical expenses.

#### 3) The results of DNR decisions made.

After DNR decisions are made, the goals of care may change from aggressive care to comfort care only. Over half of the patients who had DNRs experienced withholding of additional therapy or withdrawal of current therapy after DNR decisions were made.<sup>43)</sup> According to Song, Kim, & Koh (2008),<sup>44)</sup>

28) Yi M, Oh SE, Choi EO, et al. Hospital nurses' experience of Do-Not-Resuscitate in Korea. Journal of Korean Academy of Nursing 2008 ; 38(2) : 298-309.

29) Kim S. op. cit., 2004.

30) Chung, S et al. op. cit., 1998.

- 33) Park, Koo, & Kim. op. cit., 2006.
- 34) Kim YS, Yoo YS. The APACHE III score and multiple organ failure (MOF) score in patients who were recipients of do-not-resuscitate decision-making. Journal of Korean Academy of Adult Nursing 2005 ; 17(5) : 762-771.
- 35) Chung, et al. op. cit., 1998.

37) Han SS., et al. op. cit., 2001

- 40) Park, Koo & Kim. op. cit., 2006.
- 41) Kim S. op. cit., 2004.
- 42) Yi, et al. op. cit., 2008.

<sup>27)</sup> Kim S. op. cit., 1999.

<sup>31)</sup> Han SS, et al. op. cit., 2001.

<sup>32)</sup> Kim S. op. cit., 2004.

<sup>36)</sup> Kim S. op. cit., 2004.

<sup>38)</sup> Kim SH & Kim. op. cit., 2008.

<sup>39)</sup> Kim S. op. cit., 2004.

<sup>43)</sup> Lee K, Jang HJ, Hong S–B, Lim C–M, Koh Y. Do–not–resuscitate order in patients, who were deceased in a medical intensive care unit of a university hospital in Korea. Korean Journal of Critical Care Medicine 2008 ; 23(2) : 84–89

the level of care changed after DNR decisions, including withholding only of resuscitation, withholding of additional support, and active withdrawal of provided support.

After DNR decisions were made, physicians reported that patients tended to be neglected in terms of treatment and nursing care.<sup>45)</sup> Nurses also asserted that interventions were less aggressive.<sup>46)</sup> In such situations, nurses experienced guilt or moral distress and depression because they had not done their best.<sup>47)</sup>

# 4) The attitudes and experiences of the people involved

The integrative review indicated that there were differences in attitudes and understanding regarding DNR decisions across the research population. Elderly patients had significantly different attitudes toward DNRs, depending on their self-esteem.<sup>48)</sup> One hundred and nineteen emergency medical technicians exhibited different attitudes toward DNRs, depending on their personal and professional characteristics.<sup>49)</sup> Nurses' understanding of and attitudes toward DNRs also differed significantly, depending on their religion, career, educational level, clinical experience, and experience with DNRs.<sup>50,51)</sup> These different attitudes and experiences of people who are involved in DNR situations may influence their practices at the end of life.

# $\mathbb{N}_{\cdot}$ Discussion

The discussion below includes the following points: 1) how to understand Korean patients' autonomy in the decision-making process and 2) how to help patients make DNR decisions. For a deeper understanding, the discussion also questions what kind of research format should be used in future DNR-related research in Korea.

First, according to the research findings, the people making DNR decisions are not the patients themselves; rather, it is physicians and family members who make DNR decisions in Korea. Comparing Korean and American cultures with respect to this issue, the major difference was in the primary decision-maker for DNR orders. Based on this phenomenon, a question arises: Are patients' preferences and autonomy neglected

48) Lee MH & Kang op cit., 2007

<sup>44)</sup> Song T, Kim K, Koh Y. Factors determining the establishment of DNR orders in oncologic patients at a university hospital in Korea. The Korean Journal of Internal Medicine 2008 ; 74(4) : 403–410.

<sup>45)</sup> Han SS, Han, & Yong op. cit., 2003.

<sup>46)</sup> Kim S. op. cit., 2004.

<sup>47)</sup> Yi, et al. op. cit., 2008.

<sup>49)</sup> You S-K, Jung J-Y, Shin S-Y, Choi Y-I, Choi H-K. Recognition and attitudes on ethical issues for DNR of 119 rescue party. Journal of Korean Academia-Industrial cooperation Society 2009; 10(12): 3931–3942.

<sup>50)</sup> Han SS. et al. op. cit., 2001.

<sup>51)</sup> Sung, et al. op. cit., 2007.

in Korea? As opposed to the Western cultural practice of respecting patient autonomy, Korean culture is more focused on the value of family as an extension of the patient. For example, "good death" in Korea is defined as undergoing the dying process and facing the moment of death in the presence of family members.<sup>52</sup>) Therefore, health care providers who care for Korean patients should maintain contact and communicate with patients' families during the DNR decision-making process. However, considering the findings of Shim et al. (2000),<sup>53)</sup> the level of intervention patients expected was lower than that provided by primary caregivers and doctors, so health care providers and family members might provide aggressive care to patients at the end of their lives without asking for the patients' preferences or opinions. This means health care providers have to make an effort to ascertain patients' opinions.

Second, to improve the understanding of patients with DNRs, one must define the patients' experiences in the research. Over the past 10 years, most research regarding DNR decisions has been comprised of descriptive studies with populations of health care providers or family members. Therefore, researchers must expand the research population to include patients and family members. Additionally, future research needs to apply various research methods, including intervention research and outcome research. According to the results of this paper, for the last 10 years, most studies regarding DNR decision-making have been descriptive in nature. Descriptive research is helpful for Korean nurses to care for patients and family. However, to deepen health care providers' understanding of DNR decisions and enable them to provide greater assistance to patients, studies conducted regarding DNR decisions should employ other research methods.

Finally, the finding indicating that the attitudes regarding DNR decisions among care providers, including emergency medical technicians,<sup>54</sup>) may differ based on personal characteristics may underscore the importance of ethics education in the health care discipline. In terms of professional education, evidence indicated that there were differences in attitudes toward and understanding of DNR decisions between nurses and doctors.<sup>55–57</sup>) Korean nurses still believe that patients' preferences are the most important factor.<sup>58</sup>) Nurses indirectly serve as

56) Han SS, et al. op. cit., 2007.

<sup>52)</sup> Kim S, Lee Y. Korean nurses' attitudes to good and bad death, life-sustaining treatment and advance directives. Nursing Ethics 2003; 10(6): 624-637.

<sup>53)</sup> Shim, et al. op. cit., 2000.

<sup>54)</sup> In the original article, You, Jung, Shin, et al. (2009) used "119 rescue parties" instead of "emergency medical technicians," the official terminology.

<sup>55)</sup> Han SS. op. cit., 2005.

<sup>57)</sup> Lee. op. cit., 2007.

<sup>58)</sup> Han SS. op. cit., 2005.

counselors for families during the DNR decision-making process,59) and 51% of nurses disagreed with the following statement: "It is right for physicians to make DNR decisions when the patient's health status is well known".<sup>60)</sup> This shows that Korean nurses take on the role of patient advocate. The family-centered approach in Korea nevertheless relies on the ideas that patients' preferences and wishes are important and that families understand what these are. Interdisciplinary team members, including nurses, are responsible for acting as liaisons between families and physicians in end of life situations. Better communication of patient wishes may help to decrease both the primary caregivers' burden and health care providers' moral distress. Professional education might bring about these outcomes. Better educated health care providers would better represent their patients' wishes. In the future, education in the health care discipline needs to improve how health care providers advocate for patients. Better communication of a patient's wishes may help to decrease health care providers' moral distress and the family's burden. With a deeper understanding of phenomena regarding DNR decisions in Korea, the discussed points of practice, research, and education may help doctors and nurses provide better care to patients in Korea.

# $V_{\cdot}$ Conclusion

This integrative review of twenty articles published in Korean journals retrieved from the three Korean biomedical databases found that DNRs are widespread in Korean clinical settings, with health care providers' support for their necessity. However, DNR decisions are generally made, not by patients, but by health care providers and family members in Korean culture. Therefore, in practice, much more weight needs to be placed by health care providers in Korea on what is good for the patient. Health care providers play significant roles as patient advocates, helping patients' voices be heard in the family-centered approach. To better understand DNR decisions, researchers must use various research methods, rather than simply conducting descriptive studies, and expand the populations investigated to patients, rather than simply using family members and health care provider populations. At the same time, health care providers must receive specific education equipping them to facilitate communication among all people involved in DNR decisions.

#### Keywords

Do-Not-Resuscitate, Integrative Review, Korea

# 한국의 심폐소생술 금지(Do-Not-Resuscitate, DNR) 대한 통합적 고찰

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#### ○ 국문초록

본 연구는 한국의 중환자 혹은 말기환자의 생애말기 결정의 하나로 널리 선택되고 있는 심폐소생술 금지(Do-Not-Resuscitate, DNR) 결정에 대하여 출간된 연구논문의 특성을 규명하고 심폐소생술 금지 결정과 관련된 특성을 고찰 하고자 시도되었다.

연구방법으로는 통합적 문헌고찰을 적용하였고 연구대상으로는 1998년부터 2010년까지 3개의 한국 의료 데이터베 이스에서 한국어로 쓰여진 심폐소생술 금지와 관련된 논문 20개를 찾아 분석하였다.

연구결과는 다음과 같다. 첫째, 한국에서 수행된 대부분의 심폐소생술 금지와 관련된 연구는 의료인들을 대상으로 하여 서술적 조사연구로 이루어지거나 의무기록의 후향적 고찰을 통해 진행되어 왔다. 둘째, 연구논문의 결과를 통해 확인된 심폐소생술 금지와 관련된 주요 특성은 다음과 같다. 심폐소생술 금지 결정은 환자보다는 가족이나 의사에 의 해 따라 결정되는 것으로 나타났고, 한국의 의료상황에서 심폐소생술 금지 결정에 영향을 미치는 요인으로는 의학적 무용성, 연령, 품위 있는 죽음, 및 경제적인 어려움을 포함하는 것으로 조사되었다.

본 연구의 결과가 의료분야에 시사하는 바는 다음과 같다. 첫째, 가족 중심의 한국 사회 문화에서 가족들이 환자의 심폐소생술 금지와 관련된 결정을 할 때, 환자의 소망과 선호도를 잘 파악하고 이를 따른 결정을 할 수 있도록 돕는 것 이 필요하겠다. 둘째, 생애 말기에 처한 환자를 돌보는 여러 관련 의료인 중에 간호사는 환자의 가족과 의사 사이에서 의 중간자 역할을 잘 수행할 책임이 있겠다. 셋째, 환자의 소망과 선호도에 관해 보다 적극적으로 의사소통을 하는 것 은 현 상황에서의 의사결정 주체인 가족의 부담감을 줄이고 의료진의 도덕적 고뇌를 감소시키는 데에 도움이 될 것이 다. 마지막으로 이러한 내용이 실무에서 잘 반영되기 위해서, 심폐소생술 금지와 관련된 추후 연구들은 환자를 포함한 연구대상, 다양한 연구방법론을 적용하여 더욱 활발히 이루어져야 하겠다.

#### ○ 색인어

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