IDENTIFICATION OF BIOETHICAL DILEMMAS, ETHICAL REASONING, AND DECISION-MAKING IN MILITARY EMERGENCY MEDICINE DEPARTMENTS

A GRADUATE MANAGEMENT PROJECT
SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE HCA PROGRAM

BY

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FORT SAM HOUSTON, TEXAS
MAY 2000
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ABSTRACT
**Background.** Little is known about (1) the range and frequency of bioethical dilemmas that military emergency medicine physicians and residents encounter, (2) their most troublesome dilemmas and concerns, and (3) their ethical reasoning and decision-making in resolving these complex issues. By identifying the type and frequency of bioethical dilemmas faced by military emergency medicine physicians and residents, bioethics training can be tailored to address issues that have been identified as being perceived as the most troubling, having the greatest importance, or are most frequently encountered.

**Method.** An anonymous survey was sent to 249 physicians and residents at six military emergency medicine residency sites. The survey collected demographic data, as well as information on the type and frequency of bioethical dilemmas faced, the ethical reasoning used, and whether decision-making models were employed in addressing the bioethical issues. **Results.** Of the 115 physicians (46.2%) who responded, an overwhelming 98.3% said they had frequently encountered bioethical dilemmas in their clinical practice, with these dilemmas being usually identified by “gut feeling”, “conflicting values”, or by “patients desires”. Bioethical dilemmas regarding informed consent, privacy/confidentially, and do-not-resuscitate (DNR) orders occurred most frequently, followed by dilemmas regarding triage, quality of life, and the allocation of scarce resources. Dilemmas described as “most troubling” included conflicts involving DNR situations, futile care, confidentiality/patient privacy, patient competency, and allocation of scarce resources. The respondents said they most frequently relied on a mentor or superior, followed by another professional colleague for assistance in resolving their dilemmas. Decision-making models were rarely mentioned by participants as a preferred way to resolve dilemmas, with only twelve participants providing input as to their structured approach to decision-making.

**Conclusion.** The bioethical dilemmas that military emergency medicine physicians and residents face
are apparently common and warrant the attention of physicians, educators, and ethicists. Bioethics education should go considerably beyond the goal of sensitizing physicians to bioethical problems in medicine. It should provide physicians with the conceptual, moral reasoning, and interactional abilities to deal successfully with most of the moral issues they confront in their daily practice. There is a growing need for strategies and frameworks that can be used by healthcare professionals to organize and present clinical information in a way that is usefully supportive of the decision-making process and is required of patients and/or their families. It is recommended that bioethics education be ongoing throughout a physician’s career and be centered on the kinds of moral problems that physicians encounter most frequently in practice rather than on sensational cases of the type that occur only rarely.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS........................................................................................................... i  

ABSTRACT................................................................................................................................. ii  

LIST OF TABLES........................................................................................................................ vi  

LIST OF FIGURES.................................................................................................................... vii  

Chapter  

1  
INTRODUCTION..................................................................................................................... 1  
Conditions which Prompted the Study................................................................................. 1  
Statement of the Problem........................................................................................................ 4  
Literature Review..................................................................................................................... 5  
Purpose.................................................................................................................................... 7  

2  METHODS AND PROCEDURES......................................................................................... 9  
Survey Instrument.................................................................................................................... 10  
Survey Reliability and Validity.............................................................................................. 12  
Target Population................................................................................................................... 12  
Ethical Considerations........................................................................................................... 13
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demographics of Physicians Responding to the Questionnaire</td>
<td>15</td>
</tr>
<tr>
<td>2. Frequency of Bioethical Dilemmas</td>
<td>18</td>
</tr>
<tr>
<td>3. Troublesome Bioethical Dilemmas Reported by Participants</td>
<td>20</td>
</tr>
<tr>
<td>4. Resources Utilized in Resolving Dilemmas</td>
<td>21</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification and Recognition of Bioethical Dilemmas</td>
<td>16</td>
</tr>
<tr>
<td>2. Importance of Bioethical Dilemmas</td>
<td>17</td>
</tr>
<tr>
<td>3. A Decision-Making Approach When Time for Detailed Analysis is Insufficient</td>
<td>34</td>
</tr>
</tbody>
</table>
CHAPTER ONE  
INTRODUCTION

Recent advances in medical technology and research have made possible an unprecedented level of health care for those living in economically advanced nations like the United States. Fast-acting pharmaceuticals, cardiac defibrillators, assisted-ventilation, telemedicine, artificial organs, and transplantation are just a few of the weapons in our medical arsenal today that simply did not exist only fifty years ago. Nowhere is this more evident than in the pre-hospital or emergency medicine arena, where providers are faced with advanced medical technology that has often made dying a choice rather than an inevitable event. Not coincidentally, the field of bioethics has also experienced unprecedented growth over the same time span, with many of the bioethical issues being driven by the power of our new technological medical prowess. All too often it seems as though medicine asks “Can we?” before asking “Should we?” and therefore many Americans are doubtful that bioethics can ever keep pace with rapidly changing technologies. As technologies advance and the healthcare environment changes, the struggle to identify pertinent bioethical issues has prompted numerous institutional efforts, including initiatives of the American Association of Bioethics, The Center for Bioethics, and the Hastings Center for Bioethics, whose goal is to expand bioethical education and stimulate discussion of bioethical issues.

Conditions which Prompted the Study

While the debate continues regarding the nature of bioethics education, there is consensus within a variety of healthcare professions that many healthcare providers require assistance in identifying and resolving bioethical dilemmas and conflicts (Frisnia, 1993). For example, in civilian practice, while some care providers feel prepared to face bioethical dilemmas, others have doubts about their ability to
recognize moral problems in patient care (Josen, Siegler & Winslade, 1986).

Bioethics is of increasing concern to clinicians. However, the relevance and importance of ethical problems and bioethical training to clinical practice have not been adequately studied. It is not known how often ethical problems pose difficulty for clinicians or whether physicians can be made more aware of ethical problems (Lo & Schroeder, 1981). There are several reasons why little is known about the epidemiology of bioethics. It is often difficult to define bioethical problems and no objective or universal standard exists by which a presumed ethical problem may be verified. Numerous medical groups and associations have developed codes of ethics and professional guidelines (Green, Mitchell, Stocking, Cassel, & Siegler, 1996), and many diverse methods have been used to promote ethical behavior among physicians. Bioethics education has become one of the more common avenues in which to promote and discuss ethical behavior. However, given the overcrowded state of medical curricula, the competition for student time, and economic constraints, some measure of effectiveness of teaching bioethics is increasingly sought. While it is not known whether training in bioethics alters the number of cases perceived by a physician as posing ethical problems or whether, once taught, bioethical training is applied to clinical settings, studies have found that some forms of bioethical training do help. A study by Pellegrino et al. found that a majority of respondents who had formal training believed that the training had been “very or somewhat successful” in enabling them to identify value conflicts, increasing their sensitivity to patients’ needs, and helping them to understand their own values better or to deal more openly with moral dilemmas with patients and fellow professionals (Pellegrino, Hart, Henderson, Loeb, & Edwards, 1985). Despite these findings, we do not know conclusively whether the training curricula and guidelines are successful at preparing physicians to act ethically under the strained and difficult conditions of clinical practice, or whether the ethical teachings are being applied at the bedside.
Applied biomedical ethics is emerging even more slowly in the military health care system than in its civilian counterpart. Issues of resource allocation, concerns regarding patients’ rights, and diminishing military budgets require sensitivity to the ethical dimensions of policy development within the military healthcare system. There have been only limited attempts to assess the understanding of bioethical dilemmas and conflicts by providers in the military healthcare system. One of these attempts was a 1993 study which indicated that among a sample population of 121 Army Medical Department officers, these officers often lacked an adequate understanding of bioethical conflicts and the means to resolve them (Frisina, 1993). The study further identified that senior AMEDD officers often find themselves confronted with bioethical problems for which they seem to lack the ability or mechanism to resolve. Perhaps most revealing is that for some senior officers, ethics and ethical issues were not perceived to be of great significance (Frisina, 1993). It is obvious that more research should be accomplished in this area to further define what bioethical dilemmas military providers are faced with, and whether these providers possess the necessary skills, tools, and confidence to comfortably deal with their resolution. It is possible that, in order to reduce research duplication, researchers have neglected analysis of situations arising in the military healthcare system because they assumed that bioethical issues arising from military situations are equivalent to those that arise in civilian settings, which may or may not be the case.

Bioethical problems have not been well addressed by ethicists in either the military, or more specifically, the emergency medicine setting. The peculiarities of the emergency setting raise distinctive bioethical problems or, at least, lend novel twists to the bioethical problems common to medicine (Iserson, Sanders, Mathieu, & Buchanan, 1986). Because of the unique setting, there are bioethical problems specific to the specialty worthy of distinct inquiry.
Like their civilian peers and other health professionals, military emergency medicine physicians and residents function in accordance with various ethical codes, such as the Hippocratic Oath, the World Medical Organization’s Declaration of Geneva, and the American College of Emergency Physicians Ethics Code (Sanders, Derse, Knopp, Malone, Mitchell, Moskop, Sklar, Smith, & Allison, 1991). These professional oaths and codes of ethics are an important source of moral guidance for physicians. In addition to the codes that their civilian counterparts follow, these military physicians assume one set of obligations as physicians, including beneficence, nonmaleficence, and respect for autonomy. They also assume another set of obligations as members of the Armed Forces, such as maintaining combat readiness and maximizing the fighting strength of the force. These differing obligations may come into conflict as restricted autonomy, triage, and limited confidentiality in the military healthcare setting are necessary.

Statement of the Problem

Currently, there is no system in place to adequately identify the type of bioethical problems being confronted by military physicians working in emergency medicine departments, nor the frequency in which the dilemmas are occurring. Additionally, the ethical reasoning and decision-making employed by these physicians has not previously been assessed. As such, no attempts can currently be made to assist emergency medicine physicians in coping with the specific bioethical dilemmas that are unique to military emergency medicine departments. This lack of research has resulted in a knowledge gap concerning whether emergency medicine providers in the military healthcare system readily identify and deal with bioethical dilemmas. If so, what dilemmas are most frequently encountered in emergency medicine operations? Do these physicians currently have the ability to seek adequate resolution of the dilemmas? What skills, knowledge, and abilities can be influenced or enhanced by ethics committees or
education and training efforts?

**Literature Review**

Despite the prominence of bioethics in medicine there is little collected information on physicians’ perceptions of bioethical problems in clinical settings or how physicians feel these dilemmas affect them. While studies have examined related occurrences - such as the alteration of medical students’ outlooks and attitudes concerning their ethical environment (Wolf, Balson, & Faucett, 1989), and physician desensitization to certain moral issues (Hafferty, 1991; Self, Baldwin, & Wolinsky, 1992; and Hebert, Meslin, & Dunn, 1992) - the ethical life of practicing physicians remains largely enigmatic (Bickel, 1991).

Most of the published research has focused on the bioethical dilemmas of medical students and interns. There have been few attempts to evaluate healthcare providers in their respective clinical environments. Hence, the type and frequency of bioethical dilemmas that physicians identify are relatively unknown, with a few exceptions. Lo and Schroeder prospectively studied hospital-based physicians and found that physicians reported that one of every six cases in a general medical ward of a university hospital presented serious bioethical problems - the frequency increased to one-third of all cases when assessed by an internist with training in bioethics. This study shows that bioethical problems may be under-identified in this setting (Lo & Schroeder, 1981). Davis used an open-ended survey to define a range of clinical situations viewed as bioethical problems by Canadian nurses (Davis, 1988). Gramelspacher et al. interviewed acute care physicians and nurses about past cases and found that while physicians and nurses recalled similar ethical problems, most of these problems revealed conflict among health professionals (Gramelspacher, Howell, & Young, 1986). Since different methods were used in these studies, it is difficult to know whether bioethical problems have become more prevalent,
whether sensitivity to bioethics problems has increased, or whether future methods will elicit higher reporting.

    Most of the recent literature on bioethics education has focused on what core curriculums should include, how the material should be taught, and how it should be analyzed (Culver, 1985; Beauchamp & Childress, 1989; and Seedhouse, 1991). There is considerably less discussion, however, of what bioethical issues physicians actually confront, and the impact the resulting dilemmas might have on the physicians as they adapt to the clinical world and make decisions concerning their own conduct and role. In other words, current thinking does not situate bioethics education within the context of ongoing ethical development (Bickel, 1991).

    In addition to the type and frequency of bioethical dilemmas, the ethical reasoning and decision-making models that physicians employ are also of importance in painting an accurate picture of the ethical environment in which physicians work. Many physicians experience considerable difficulty in using what they know about ethics to help them make competent bioethical decisions in their day-to-day clinical practice (Myser, Kerridge & Mitchell, 1995). Again, there is limited research in this area even though there has been a widespread recognition among clinicians of growing but unmet needs for competency in bioethics (Bissonnette, O’Shea, Horwitz, & Route, 1995). It is in making decisions and living with their consequences that bioethics ceases to be only a theoretical discipline and begins to become a professional code of conduct (Kass, 1990; and Coles, 1979). Beginning this decade, attention has been given to assessing the ability to recognize and analyze global bioethical issues unique to various clinical settings, such as clinics for pediatrics, geriatrics, or intensive care medicine (White, Hickson, Theriot, & Zaner, 1995). The current lack of research in emergency medicine settings provides an opportunity for expanded research and analysis, especially in the military healthcare system.
Purpose

This project strives to extend current knowledge about bioethical dilemmas, and their subsequent resolution, as perceived by military emergency medicine physicians and residents. Along with identifying bioethical dilemmas, clinical ethical reasoning and analysis are skills as central to good patient care as is the efficient application of biomedical knowledge in diagnosing and establishing a prognosis. In order to bridge the gap between the possession of bioethical knowledge and its actual use in clinical decision-making, an analysis of the way clinicians identify and attempt to manage bioethical issues in their clinical practice is needed. Therefore, this project will not only assess emergency medicine providers’ knowledge of the types and frequency of bioethical dilemmas and actions arising from diagnostic and treatment strategies, but also assess provider reasoning when dealing with these dilemmas, and assess what decision-making model (if any) is employed in resolving the dilemmas. This three-pronged assessment is necessary since simply trying to “apply” the knowledge of bioethical theories, principles, concepts, and rules in the clinical setting does not ensure bioethical competence in clinical decision-making. In addition to providing information in the aforementioned areas, the study collects information on the training background of participants, and the use and perception of ethics committees. This information can be used to gauge the value of both ethics training and ethics committees.

By assessing this information, bioethical training can be tailored to address these issues and their resolution, the quality and appropriateness of decisions can be strengthened, and support can be provided to those making decisions that impact the health and well-being of patients. This research will also help narrow the knowledge gap concerning whether emergency medicine providers in the military healthcare system readily identify and deal with bioethical dilemmas.
CHAPTER TWO

METHODS AND PROCEDURES

This study begins to demonstrate the range of bioethical dilemmas occurring in military emergency medicine departments and initiates the process of categorizing the dilemmas confronting emergency medicine physicians and residents. The current study was designed to obtain descriptive baseline data and to suggest educational and policy approaches for dealing with the full range of bioethical problems that confront these clinicians.

Six emergency medicine residency programs currently exist in the military health system. Medical officer staffing of these emergency medicine department range from 34 to 47 physicians (staff and residents combined). The programs are located at:

- Brooke Army Medical Center/Wilford Hall Medical Center, San Antonio, Texas
- Darnall Army Community Hospital, Fort Hood, Texas
- Madigan Army Medical Center, Tacoma, Washington
- Naval Medical Command, Portsmouth, Virginia
- Naval Medical Command, San Diego, California
- Wright State University, Dayton, Ohio (Wright-Patterson Medical Center)

Program directors at each of the six residency sites were contacted about the possibility of administering the survey at their institutions. All six of the centers agreed to participate. At the author's request, the program directors or the chief residents notified the emergency department physicians and residents about the survey and encouraged them to participate. Staff physicians and residents were assured that responses would be confidential and that only aggregate data should be reported.

With approval to survey all six facilities, the project encompassed all Army, Air Force, and Navy hospitals that currently have emergency medicine residency programs and solicited information
from all emergency medicine physicians and residents stationed at these facilities. These sites are recognized as being staffed by respected leaders in the emergency medicine field as well as providing the military healthcare system with its future emergency medicine physicians. The project focused on:

- the type of bioethical dilemmas faced,
- the frequency of bioethical dilemmas faced,
- the ethical reasoning employed in resolving the dilemmas, and
- the utilization of decision-making models in dealing with these bioethical dilemmas

**Survey Instrument**

The survey instrument was a self-administered questionnaire. The survey instrument was developed specifically to collect data on addressing objectives of this study. Portions of the survey were extracted from a previous pilot survey of Army Medical Department Officers (Frisina, 1993) in which senior Army officers were queried concerning their understanding of bioethical dilemmas and conflicts. The remainder of the survey consists of questions designed to gain a broader insight into what specific bioethical dilemmas are most frequently faced by emergency medicine physicians and residents and how they confront these dilemmas in their day-to-day practice. The survey was also designed to obtain demographic information and a baseline assessment of content knowledge in biomedical ethics perceived by each subject.

The survey consisted of twenty-six questions and generally took 15-30 minutes to read and complete. The questions provided multiple-choice, dichotomous, and scaled options as possible answers, along with open areas for explanation of answers not covered in questions. Six demographic questions focused on rank, age, gender, job title, length in position, and geographical location while two open-ended questions asked participants to describe decision-making models they have used and
troublesome dilemmas they have encountered. The remaining sections of the survey were divided into content areas. A majority of these survey questions asked participants to rate the frequency of exposure to the subject area using a Likert-type scale. The response scale ranked from a high of “1” for “frequently” to a low of “5” indicating “never”. The survey was pre-tested for clarity on a sample of non-participating emergency room personnel prior to distribution. Copies of the survey instrument are available at Appendix A.

The initial mailing of survey instruments, including pre-paid return envelopes, was delivered to all facilities January-February 2000. A cover letter attached to the five page questionnaire explained the nature and scope of the study, informed the providers of voluntary participation, and reiterated that participation and responses would be kept anonymous. The surveys were encoded with a geographical location in order to track distribution of participants. This encoding also enabled a follow-up contact to encourage better participation from poorly responding sites. In keeping with recommended rates, a target response rate of 30% or greater was desired (Cooper & Schindler, 1998).

For clarity purposes, the operational definition of a bioethical dilemma was provided as “a situation in which there is a question of what one ought to do, rather than what is usually done or can be done, and that which requires a resolution of value choices, as opposed to resolving merely factual or scientific matters”. For example, when dealing with the withholding of medical treatment, does “doing good” for the patient (beneficence) override “doing no harm” to the patient (nonmaleficence) - the conflict of these differing values results in an ethical dilemma. This definition is consistent with standard definitions on medical ethics (Clouser, 1979; Ladd, 1979; and Beauchamp & Childress, 1979) and was explained in the letter attached to the survey.

Survey Reliability and Validity
As this survey instrument has been constructed specifically for this study, and only a portion of a previously used survey instrument was used, there is currently no literature to indicate a consistent level of reliability for the survey instrument.

An expert validity methodology was utilized for the survey and the instrument was pilot tested for face validity prior to administration (experts included one emergency medicine physician, one ethicist/lawyer, one ethicist/chaplain, and four senior healthcare administrators). Expert reviewers affirmed the validity of the instrument, indicating that the survey was reflective of its intended content emphasis for each area and sub-topic. The reading level was congruent with college level vocabulary and the average time to complete the survey was 15-30 minutes.

Participants’ comments have been thematically categorized and integrated with the quantitative findings so as to illustrate, elaborate, and qualify specific aspects of reported dilemmas. Descriptive analyses and graphical displays have also been used to code and examine the relationship between the responses and the various positions of respondents.

**Target Population**

All emergency medicine physicians and residents from the six sites were encouraged to participate. This population included all emergency medicine physicians and residents currently stationed at Brooke Army Medical Center/Wilford Hall Medical Center, Darnall Army Community Hospital, Madigan Army Medical Center, Naval Medical Command San Diego, Naval Medical Command Portsmouth, and Wright-Patterson Medical Center.

This target population provides the study with a cross-section of Army, Navy, and Air Force professionals in the emergency medicine arena. In addition to the service branch diversity, participants in the study hold a variety of duty positions to include: Chief of the Emergency Medicine Department,
emergency medicine staff physician, and emergency medicine resident.

**Ethical Considerations**

Survey participant confidentiality is an important consideration whenever survey methods are employed and anonymity of all participants in the survey is protected and maintained. To ensure confidentiality, only consolidated survey reports are presented.

Throughout this study, patient information as it relates to bioethical dilemmas is examined. Any patient information divulged during the survey process is protected under The Privacy Act and other patient protection policies. These policies require extreme diligence and, among other things, preclude disclosure of names, social security numbers or other personal data. The patient information involved in this study is limited to the physician’s subjective analysis of the bioethical issues surrounding the patient. No names or other identifying information on patients have been collected and any reference to patients is presented in statistical form or anonymous vignettes only.
CHAPTER THREE

RESULTS

Of the 249 potential participants, 115 returned their surveys for an overall return rate of 46.2%. Specific return rates for staff versus residents was 50.1% and 44.2% respectively. Response rates for facilities ranged from 30% to 76.5%. Other than response rates, analysis failed to show any other significant differences in the means of the six residency sites. Therefore, the combined data from all sites were used to compute descriptive statistics, and all results are based on the responses of the 115 physicians who participated in the survey.

Analysis of data and descriptive statistics were derived using the computerized statistical application of SPSS. In the analysis of the responses, frequency distributions were examined, as were means and standard deviations of selected variables. A small percentage of missing data was replaced with statistical estimates. Percentages were rounded when appropriate.

Demographic Analysis

Various measures of central tendency (i.e. mean, median, mode, and SD) were recorded for subjects' responses based on the age, gender, rank, title of current position, time in current position, and geographical location.

The responding physicians ranged from 25 to 54 years of age (mean age of 35). Respondents were primarily male (91.3%), in keeping with the general trend for male dominance in this field, especially in the military setting. Participants in this survey hold a variety of duty positions ranging from directors of emergency departments to first year emergency medicine residents. Staff members provided 33.9% of the responses, with residents contributing the remaining 66.1%. The range of
military rank for the participants support the spread of duty positions and staff/resident distribution, with over one half (53%) of the respondents reporting their rank as 0-3 (typically the rank of a resident), and another third (34.8%) reporting a rank of 0-4 (possible staff or resident). In addition to the remaining 13 officers (eleven 0-5's, and two O-6's), one civilian staff member responded to the survey. The average mean duration of time in current position was 22 months (range = 1-96 months). At baseline, there were no significant differences among the staff versus resident demographic characteristics. Table 1 summarizes findings of demographic analysis.

<table>
<thead>
<tr>
<th>Table 1. Demographics of Physicians Responding to the Questionnaire*</th>
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<tr>
<td><strong>No. (%)</strong></td>
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<tr>
<td>Mean age in years (range)</td>
</tr>
<tr>
<td>Gender, male</td>
</tr>
<tr>
<td>Rank</td>
</tr>
<tr>
<td>O-3</td>
</tr>
<tr>
<td>O-4</td>
</tr>
<tr>
<td>O-5</td>
</tr>
<tr>
<td>O-6</td>
</tr>
<tr>
<td>Staff</td>
</tr>
<tr>
<td>Residents (66.1)</td>
</tr>
<tr>
<td>Mean time in current position, months (range)</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>Brooke Army Medical Center/Wilford Hall Medical Center</td>
</tr>
<tr>
<td>Darnall Army Community Hospital</td>
</tr>
<tr>
<td>Madigan Army Medical Center</td>
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</table>

* N=115

**Identification and Recognition of Bioethical Dilemmas**

An overwhelming 98.3% of the participants said they had encountered bioethical dilemmas in their clinical practice. Two participants (1.74%) stated they have never encountered a work-related bioethical dilemma. The high rate of respondents encountering work-related bioethical dilemmas is not
surprising, especially given the nature of today's healthcare environment. What is surprising is that for those who indicated they had experienced a work-related dilemma, one-fourth were not willing to write a narrative to describe the problem and how the issues were resolved.

Of those identifying bioethical dilemmas in the work place, by far the most popular response to identifying or recognizing a dilemma was "gut feeling" - in fact 36.2% ranked it as being used most often. Residents where found to have relied more heavily on their “gut feelings” than staff physicians. Among all respondents, the next most powerful factors influencing their approaches to bioethical issues were “conflicting values”, followed by “patients desires”. Used less frequently were the “law”, “ethics education”, and “religious training” (in order of frequency cited). Observation of others was rarely used which is not unexpected considering the emergency room setting and the autonomy of the physicians. Unexpectedly, only one physician mentioned using a decision-making model, with none of the participants mentioning professional codes, standards of care, or command policies. Figure 1 displays breakdown.

![Figure 1. Identification and Recognition of Bioethical Dilemmas](chart)

<table>
<thead>
<tr>
<th>Method of Identification</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Gut Feeling</td>
<td>4.17%</td>
</tr>
<tr>
<td>Conflicting Values</td>
<td>3.87%</td>
</tr>
<tr>
<td>Patients Desires</td>
<td>3.6%</td>
</tr>
<tr>
<td>Law</td>
<td>3.51%</td>
</tr>
<tr>
<td>Ethics Education</td>
<td>2.55%</td>
</tr>
<tr>
<td>Religious Training</td>
<td>2.5%</td>
</tr>
<tr>
<td>Observation of Others</td>
<td>1.27%</td>
</tr>
<tr>
<td>Decision-making Model</td>
<td>1%</td>
</tr>
</tbody>
</table>
Type, Frequency, and Importance of Bioethical Dilemmas

Emergency physicians and residents were asked to rank twenty bioethical dilemmas in order of importance to an emergency department. The results from this forced-distribution/ranking scale are graphically displayed in Figure 2. In addition to these twenty dilemmas, respondents noted "other" dilemmas as equally important: practicing procedures on the newly dead, use of abortifacients (post-rape), physician-assisted suicide, administration of the morning-after pill, and staff rights to refuse to participate in morally objectionable treatments.

By asking participants to rank bioethical dilemmas relative to each other, the survey tried to determine what dilemmas were considered “most important” in the day-to-day operations of the emergency departments.

Figure 2. Importance of Bioethical Dilemmas
When questioned as to whether these specific topics had presented ethical conflicts for them “frequently”, “often”, “sometimes”, “rarely”, or “never”, the physicians stated that bioethical dilemmas regarding informed consent, privacy/confidentially, and do-not-resuscitate (DNR) orders occurred most frequently, followed by dilemmas regarding triage, quality of life, and the allocation of scarce resources.

Table 2 charts the most frequently encountered problems.

Table 2. Frequency of Bioethical Dilemmas

<table>
<thead>
<tr>
<th>Issue</th>
<th>Frequently</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
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<tbody>
<tr>
<td>Informed consent</td>
<td>18.3%</td>
<td>29.6%</td>
<td>26.1%</td>
<td>21.7%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Duty to treat</td>
<td>3.5%</td>
<td>12.2%</td>
<td>38.3%</td>
<td>27.8%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Quality of life</td>
<td>9.6%</td>
<td>20.9%</td>
<td>46.1%</td>
<td>19.1%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Patient competency</td>
<td>5.2%</td>
<td>23.5%</td>
<td>47.8%</td>
<td>20.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Privacy/confidentiality</td>
<td>15.7%</td>
<td>30.4%</td>
<td>24.3%</td>
<td>25.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Triage</td>
<td>9.6%</td>
<td>22.6%</td>
<td>20.0%</td>
<td>35.7%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Truth-telling/disclosure</td>
<td>7.8%</td>
<td>23.5%</td>
<td>33.9%</td>
<td>25.2%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Physician/patient relationship</td>
<td>3.5%</td>
<td>22.6%</td>
<td>40.0%</td>
<td>26.1%</td>
<td>6.1%</td>
</tr>
<tr>
<td>DNR orders</td>
<td>13.0%</td>
<td>32.2%</td>
<td>28.7%</td>
<td>22.6%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Withholding treatment</td>
<td>4.3%</td>
<td>10.4%</td>
<td>42.6%</td>
<td>36.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Rights of minors</td>
<td>1.7%</td>
<td>13.9%</td>
<td>47.0%</td>
<td>30.4%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Allocation of resources</td>
<td>7.8%</td>
<td>23.5%</td>
<td>27.8%</td>
<td>27.0%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Futile treatment</td>
<td>4.3%</td>
<td>24.3%</td>
<td>47.8%</td>
<td>20.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Refusal of care</td>
<td>7.0%</td>
<td>14.8%</td>
<td>47.0%</td>
<td>25.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Action of a colleague</td>
<td>0.9%</td>
<td>4.3%</td>
<td>45.2%</td>
<td>40.9%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Conflict of interest</td>
<td>0.0%</td>
<td>12.2%</td>
<td>29.6%</td>
<td>45.2%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Withdrawing treatment</td>
<td>0.9%</td>
<td>10.4%</td>
<td>39.1%</td>
<td>40.0%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Organ donation</td>
<td>0.9%</td>
<td>7.0%</td>
<td>28.7%</td>
<td>40.9%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Use of controversial therapies</td>
<td>1.7%</td>
<td>2.6%</td>
<td>27.8%</td>
<td>54.8%</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

Note. Due to rounded percentages and non-response from 2 participants, percentages will not necessarily equal 100%.

Lastly, a diverse set of problems was described in response to the open-ended question, "What are the three most troubling dilemmas that you have experienced in emergency medicine?" Coded categories were devised from these descriptions in order to group and quantify responses. Two-hundred-fifty-two responses were received, with 73% of the respondents providing narratives. These narratives most often described conflicts involving DNR situations, followed by futile care, confidentiality/patient privacy, patient competency, and allocation of scarce resources. Smaller
proportions of respondents mentioned conflicts related to rights of minors, withholding of care, refusal of care, conflicting wishes of family members/patients, and various other recurring conflicts. The participant’s comments were analyzed qualitatively and quantified into the coded categories for analysis.

A great deal of effort and thought appears to have gone into the input and it is noteworthy that these respondents took the trouble (and time) to write the narratives. On the whole, answers to the open-ended question corresponded well with the related questions on the more structured portions of the questionnaire.

These narratives often expanded on military-specific aspects of bioethical dilemmas. Numerous narratives voiced concerns about patients’ privacy/confidentiality issues relating to active duty service members. Apparently many of these physicians have ethical problems with “commander and chain of command” requests for “confidential” medical information on active duty members. Although these narratives typically focused on privacy/confidentiality issues, the same problems could occur in examining the detriment these requests can have on physician-patient privilege. Another contentious issue appears to be the allocation of scarce resources - while this may be more prevalent in the managed care environment sweeping the nation, a number of narratives addressed the “promise of healthcare for life” as an ethical factor. These physicians apparently find it troublesome that retirees and their family members are unable to acquire healthcare services at military hospitals.

Table 3 highlights the distribution of the top eight ethically relevant features throughout the 252 narratives. Each category is listed with the number and percentage of cases in it. A complete summary of narrative breakouts is provided at Appendix B.
Table 3. Troublesome Bioethical Dilemmas Reported by Participants

<table>
<thead>
<tr>
<th>Situation</th>
<th>No.</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR orders</td>
<td>35</td>
<td>13.9%</td>
</tr>
<tr>
<td>Futile Care</td>
<td>22</td>
<td>8.7%</td>
</tr>
<tr>
<td>Allocation of scarce resources</td>
<td>16</td>
<td>6.3%</td>
</tr>
<tr>
<td>Patient Competency</td>
<td>12</td>
<td>4.8%</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>11</td>
<td>4.4%</td>
</tr>
<tr>
<td>Rights of minors</td>
<td>10</td>
<td>4.0%</td>
</tr>
<tr>
<td>Withholding of care</td>
<td>8</td>
<td>3.2%</td>
</tr>
<tr>
<td>Refusal of care</td>
<td>8</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

In looking at the frequency of bioethical dilemmas reported, it is not surprising that only three of the emergency physicians and residents reported that these dilemmas never affected their productivity (2.6% of total participants).

Assistance in Resolving Dilemmas

With the type and frequency of bioethical dilemmas reported, and with the complexity of the issues faced, it is not unreasonable to expect that a large percentage of physicians require assistance in addressing the problems. In fact, 78% of the respondents stated they had sought assistance, in one form or other, in resolving these conflicts. In order to determine what resources were most frequently utilized, the participants were asked, "From whom, and how often, have you sought help?" The respondents said they most frequently relied on a mentor or superior, followed by another professional colleague for assistance in resolving their dilemmas. These answers correspond well with what is expected in a "training environment" such as a residency program. Of interest is that "spouse/family member" was the third most frequently used resource in which help was sought, followed by "military directives", "lawyer" and "religious leader". Lastly, ethics committees and ethics consultants were the least used, in spite of their expertise in this area. Table 4 displays the breakdown.
Table 4. Resources Utilized in Resolving Dilemmas

<table>
<thead>
<tr>
<th>Issue</th>
<th>Frequently</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Weighted Summation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse/family member</td>
<td>5.2%</td>
<td>11.3%</td>
<td>24.3%</td>
<td>21.7%</td>
<td>13.9%</td>
<td>232</td>
</tr>
<tr>
<td>Religious leader</td>
<td>0.9%</td>
<td>7.0%</td>
<td>17.4%</td>
<td>21.7%</td>
<td>29.6%</td>
<td>181</td>
</tr>
<tr>
<td>Professional colleague</td>
<td>10.4%</td>
<td>23.5%</td>
<td>27.8%</td>
<td>13.0%</td>
<td>1.7%</td>
<td>296</td>
</tr>
<tr>
<td>Military directives</td>
<td>0.9%</td>
<td>6.1%</td>
<td>21.7%</td>
<td>28.7%</td>
<td>19.1%</td>
<td>196</td>
</tr>
<tr>
<td>Mentor or superior</td>
<td>13.0%</td>
<td>21.7%</td>
<td>32.2%</td>
<td>7.0%</td>
<td>2.6%</td>
<td>305</td>
</tr>
<tr>
<td>Lawyer</td>
<td>3.5%</td>
<td>5.2%</td>
<td>13.0%</td>
<td>27.0%</td>
<td>27.8%</td>
<td>183</td>
</tr>
<tr>
<td>Ethics consultant</td>
<td>1.7%</td>
<td>1.7%</td>
<td>6.1%</td>
<td>28.7%</td>
<td>38.3%</td>
<td>149</td>
</tr>
<tr>
<td>Ethics committee</td>
<td>1.7%</td>
<td>0.0%</td>
<td>12.2%</td>
<td>32.2%</td>
<td>30.4%</td>
<td>161</td>
</tr>
</tbody>
</table>

One individual pointed out that lawyers and ethics committees are frequently "not available" after-hours, and often not able to respond in an expedient manner when needed. However, although not utilized frequently, an overwhelming number (75%) of the respondents believe that there is a need for bioethics committees at their facilities (20% were undecided and 5% did not see such a need). Only 2% stated that their facility does not currently have such a bioethics committee, although 14% were unsure of whether one existed or not.

Resolution of Dilemmas

With or without assistance, the respondents were asked to identify ways in which they most often resolved these conflicts. Overwhelmingly, the respondents desired to maximize good or happiness of the individual (beneficence) and to avoid doing harm (nonmaleficence). Rarely did respondents report resolution of the dilemma by opting to conserve scarce resources. Likewise, few individuals indicated that dilemmas were resolved with the benefit to self or others in mind.

Decision-making models were not mentioned by any of the participants as a preferred way to resolve dilemmas. However, when asked specifically about utilization of decision-making models in confronting ethical dilemmas, twelve participants provided input as to their structured approach to decision-making. Due to the low response to this question, and the brevity of the respondents, all
twelve responses are included at Appendix C.

**Ethical Instruction and Training**

The vast majority of participants have received bioethical training in various formal and informal venues. Ninety-five percent of the participants reported having had at least one formal course in bioethics, with 87% reporting bioethics training in graduate or professional schools and 53% reported training in other university and college programs. Officer courses and Staff College provided 38% of the participants with additional training. Participants often utilized other formal or informal avenues to enrich their ethical training. Among those noted by participants were: local bioethics courses, residency training and course work, continuing medical education, religious education, hospital lectures, and personal and professional off-duty reading. A small percentage (5%) of respondents stated that they have not received any formal instruction in bioethics.

Despite the amount and variety of ethical training received, most of the respondents indicated that they would like more. Although 83% feel that the training has prepared them to adequately address bioethical problems, when asked if they desired more training 49% said yes, 36% said no, and 15% were undecided. Overall, 80% of the participants were pleased with their bioethical development and knowledge. And, augmented by their previous training in bioethics, 98.35% felt comfortable (or somewhat comfortable) with their ability in explaining their decisions. A slightly lower percentage (97.4) felt comfortable with their ability to recognize and address bioethical problems.

One of the most frequent questions about bioethics teaching is whether it can alter values and attitudes. It would seem that from the respondents confidence in addressing bioethical issues and their belief that their training has adequately prepared them, that they believe this to be true. In fact, 66% believe that ethics training should be part of the continuous quality improvement program at their
institution (14% were undecided). While it is possible that the participants who report the highest confidence about their decisions surrounding bioethical issues are displaying mere bravado, the fact that the questionnaires were submitted anonymously makes this unlikely.
CHAPTER FOUR

DISCUSSION

The majority of recent literature on bioethics tends to focus on bioethics education (what material should be taught, how the material should be taught, and how it should be analyzed). There is considerably less discussion, however, on what bioethical issues physicians actually confront, and the impact the resulting dilemmas might have on the physicians and their practice. As in other clinical specialties, there has been a sharp increase in recent years in the variety and complexity of bioethical problems in the practice of emergency medicine. Therefore, this study was designed to extend current knowledge about bioethical dilemmas in the emergency medicine arena and to identify reoccurring bioethical issues and themes in the workplace. This data can also contribute in building a more empirical basis for the design of bioethics education.

The goals of this project were to (1) identify topics in bioethics that arise in an emergency medicine department, (2) assess the frequency with which emergency medical physicians and residents encounter those topics, (3) identify ethical reasoning employed in resolving the dilemmas, and (4) examine the utilization of decision-making models in dealing with these bioethical dilemmas. The study was successful in its goals and in addition collected data on:

- participants’ levels of confidence in dealing with ethical dilemmas,
- participants’ perceptions concerning the adequacy of their training,
- particularly troublesome bioethical problems, and
- resources used to assist physicians in coping with these dilemmas.

Of particular interest were the many narratives of dilemmas faced by participants. The range and complexity of the cases underscore the difficult decisions that physicians face on a day-to-day
basis. While virtually all physicians admitted to having faced a work-related ethical dilemma, one-fourth declined to provide a written narrative of the case. It is not possible to determine the reasons, however, it is likely that these experiences may be difficult for the participants to explain due to possible conflict or painful memories, both emotionally and psychologically. It is also quite possible that the pressure of these complex cases may somehow impair care providers and impact on their decision-making abilities in future cases, although no research to date has looked at this interesting hypothesis.

A number of findings were surprising to the author, although they may not be to others with more experience in emergency medicine or bioethics education. It is hoped that perhaps a bioethics instruction program focused on these findings will be better accepted by emergency medicine educators and physicians-in-training.

**Emergency Department Environment**

Clearly, emergency medicine is unique, yet medical ethicists have often neglected or exempted emergency medicine from the same careful deliberation that has been given to other specialties (Nelson & Eliastam, 1991). This uniqueness, however, is not cause to ignore bioethical dilemmas, rather they may demand a different approach.

The decisions that must be made in a busy emergency department often do not leave a lot of time for reflection. Emergent conditions are frequently time-sensitive and a delay of a couple of minutes may mean the difference between life and death for a critically ill patient. Physicians must often make decisions very quickly and often without the benefit of ancillary testing, family input, ethics committees, court orders, or psychiatric consultation. Since the patients do not usually choose their physicians in an emergent situation, the physician must gain patient trust quickly. The physicians routinely confront dying
patients without any knowledge of their medical histories or advance directives and are required to make life-saving decisions based on incomplete information, exacerbating an already less-than-ideal situation. Stress, confusion, and miscommunication are inherent in an emergency and these factors compound the difficulties of the physicians as they deal with the added challenges of managing many diverse problems that demand time and focus. It is while operating in this high-pressure environment that the emergency physician often encounters the unique bioethical issues associated with decisions concerning initiation and discontinuation of resuscitation.

Patient-physician confidentiality can also be difficult to maintain in an open environment in which physicians, nurses, patients, security staff, police officers, paramedics, and emergency medical technicians all interact. Patients are often brought to the emergency department against their will, they may refuse standard medical treatment, and they often have acute changes in their mental status due to psychiatric illness, underlying disease, or intoxication (Sanders, et al, 1991). Emergency physicians often have little time to assess the patient's capacity/competence to make decisions regarding health care.

In this sometimes-chaotic environment, many bioethical issues may escape physicians: or physicians simply may not be able to recognize patients' values as different from their own.

**Military Component**

There is a relative absence of writings on bioethical issues that arise in military settings. However, tensions between professional responsibility and military obligation have been inherent in the dual demands of being a military physician ever since the professionalism of medicine began.

Ethical problems arise for the military physician when their obligations to the military come into
conflict with their traditional obligations as physicians. The nature of the contract agreed to by the service member when he/she enters the military renders the relationship with the military physician fundamentally discrepant from that of a civilian physician and patient, especially during combat. Thus, when during combat, the service member comes to the military physician with an injury, both members have agreed to prioritize the needs of the military. During combat, the presumption is that military needs must prevail. In peacetime this principle remains because the military must maintain combat readiness, but its overriding importance is less evident. The burden shifts, somewhat, from the military physician having to justify placing a patient’s interest before the military's to having to justify placing the military's interest ahead of the patients.

As reported in other research, and reaffirmed in part by this study, military medicine continues to have unique bioethical dilemmas. Of particular note are issues with patient privacy/confidentiality, physician-patient privilege, withholding information, and military triage. Cited frequently in this survey were patient privacy and confidentiality concerns. Restricted autonomy and triage were also mentioned as areas in which differing obligations as members of the Armed Forces and as a physician have caused conflicts. Though not specifically mentioned here, withholding information from service members, for the sake of a mission's effectiveness has not been uncommon. Lastly, triage, although not usually an issue during peacetime, has been previously studied and found to have caused conflict in military physicians. In military triage, greater moral weight is given to large numbers' interests in mass casualty situations when resources are inadequate. The principle of military medical triage holds that service members other than those most severely wounded can be treated when necessary to salvage "the greatest possible number of lives for the support of the military mission" (Howe, 1986). This doctrine,
in theory, permits a service member's interest to be sacrificed for either the medical welfare of others or for military goals, though in practice it may be rarely applied.

Whether the military's medical priorities and military physicians' general allegiance to them over time prove ethically justifiable awaits future determination. Comparisons of military and civilian doctors' dilemmas and the discrepant values that each gives priority could shed light on this subject, enabling it to be seen with greater clarity. The data provided in this study can hopefully help in such an endeavor.

**Ethical Reasoning**

Ethical reasoning and decision-making may be thought of as “professional skills”, and in this sense are as relevant to efficient clinical practice as the biomedical and clinical sciences are to the diagnosis of a patient’s problem. Despite this, many medical programs and residencies in ethics tend to focus on the teaching of bioethical theories, concepts and/or prominent bioethical issues such as euthanasia, rather than the application of ethics (theories, principles, concepts, rules) to clinical practice (Mseyer, Kerridge & Mitchell, 1995). Not surprisingly, many clinicians experience considerable difficulty in using what they know about ethics to help them make competent bioethical decisions in their day-to-day clinical practice.

Particularly disturbing in this study, is that over 36% of the responding physicians relied on 'gut feeling' when identifying and confronting bioethical dilemmas. The literature considers this an inappropriate way of identifying bioethical issues. Personal relativism associated with gut feelings, mixed with medical intervention leaves patients at risk of not receiving consistent quality care (Frisnia, 1995). Care providers ought not to act on personal whim devoid of precedent or consultation. This finding indicates the need for improved education to equip care providers to identify and resolve bioethical
problems in a structured, consistent manner.

To deal reasonably, skillfully, and perhaps most importantly, consciously in the everyday realm of healthcare, we must develop the ability to think clearly - to focus on the process of making decisions, rather than on the decision per se. A single-minded ethical reasoning approach without structure, discipline, and thought can limit judgment. Myopia can set in and important values can be forgotten. A key to sound ethical reasoning is a systematic methodology that provides discipline and structure. Methodologies are simply road maps or guideposts to help generate and order ideas. They can be viewed as crutches that help us bear the weight of complex problems and time constraints in the ordinary routine of healthcare. The trick is to find the method that helps the individual - and then to test it, customize it, and refine it until it becomes habitual (Worthley, 1999).

Ethical processing can be seen as having several components: (1) to learn to recognize bioethical dilemmas; (2) to "unpack" the dilemma and thoughtfully consider the issues and people involved; (3) to become attuned to one's own rationales and motives, noble and otherwise; (4) to develop a flexible framework with which to address and ideally resolve bioethical issues with patients and colleagues of varying seniority; and (5) to establish a personal ethic appropriate to one's role on the medical team (Christakis & Feudtner, 1993).

The development of ethical physicians is based not only on learning to approach the most prominent bioethical dilemmas, but also on developing the personal ethic needed to handle the daily ins and outs of the practice of medicine in a thoughtful, caring and appropriate way.

**Decision-making**

In a less technological and less litigious medical era, common sense and intuition were
considered sufficient to resolve dilemmas of right and wrong in patient care. However, technological improvements in medicine and increasing legal pressure to meet a perceived standard of care have highlighted the need for a systematic, rational process of ethical decision-making (Lapuma, Stocking, Silverstein, Dimartini, & Siegler, 1988). Ethics committees and ethics consultation services have even been created to respond when difficulties arise in a particular patient's care.

Physicians have a responsibility to address the growing number of complex bioethical dilemmas they are facing, but they cannot and should not make such decisions alone or without a sound decision-making framework. The healthcare professional has an obligation to attempt to resolve these dilemmas through the use of a systematic, rational decision-making process that applies bioethical principles. Bioethical decision-making should be accomplished through a critical, rational, defensible, systematic, and intellectual approach to determining what is right or best in a difficult situation.

These difficult decisions are usually made on a case-by-case basis by a physician caring for a patient. In these clinical situations widely discrepant styles in decision-making may exist. Current understanding of the factors compelling one physician to treat, another to withhold therapy, and a third to be indecisive when responsible for the same patient is rudimentary. With few notable exceptions, research in clinical decision-making has not attempted to describe or explain decisions that inherently entail bioethical considerations (Pearlman, Inui, & Carter, 1982). The lack of research in this area may, in part, be due to lay and professional sensitivity to the complexity and consequences of such decisions and a prevailing perception that these decisions are always relatively unique, and heavily dependent on the circumstances of a particular case. However, we need a greater understanding of bioethical decision-making for the purposes of broadening perspectives on our own actions and to engage in meaningful discussions of these problems with colleagues and patients. It would, for example, be useful
to know more about the nature and frequency of decisions encountered in medical practice that clinicians consider "ethical". It will also be important to learn how these decisions are made, by which parties, through what mechanisms, and the similarities and differences from case to case.

Bioethical decision-making can perhaps best be described as an active, rational process by which one decides what ought to be done through application of moral and professional principles. Traditionally, medical decisions have involved the concepts of autonomy, beneficence, nonmaleficence, and justice. Autonomy deals with the right of the individual to decide his or her own destiny and includes the concepts of informed consent, competence, and the right to refuse evaluation or treatment. Beneficence requires that treatment is contributory to the patient's good. Nonmaleficence requires that any treatment given to the patient not be harmful. Justice requires equal access to the standard of care and the avoidance of prejudicial treatment of individuals or groups (Brown, 1998). The debatable question is, “But how can ethical dilemmas be resolved when there is no absolute right or wrong?” Like all decisions, an ethical decision is a process that involves choice and risk and implies change. Every ethical decision weighs the values involved. These choices and values, and their consequences, must be considered during decision-making.

Despite disagreements regarding the "application" and scope of bioethics in medicine, ethical analysis, reasoning, and decision-making have come to be regarded by many as essential components common to all clinical practice. In any field, competence in clinical ethics depends upon four skills. First, the physician must be able to recognize ethical issues as they arise in clinical care and to identify hidden values and unacknowledged conflicts. Second, the physician must think clearly and critically about these issues in ways that lead to ethically justifiable courses of action. Third, the physician must apply the practical skills needed to implement ethically justifiable courses of action. Finally, the physician must
judge when the management of a clinical situation requires consultation with individuals or institutional bodies with additional expertise (Forrow, Arnold, & Frader, 1991). Stated slightly differently, resolution of a conflict in values depends upon recognizing the values at stake, collecting the relevant information needed to analyze the ethical problem, deciding whether any course of action will serve all values effectively, and choosing a course of action that promotes important values as effectively as possible. However, this decision-making process succeeds only to the extent that all relevant information is obtained and incorporated into the physician's reasoning process. Just as a systematic and complete history and physical examination provides the keys to understanding a complex medical problem, bioethics requires an orderly approach to identify and characterize the different values in each case, as well as any non-moral facts which affect decision making (such as information about diagnosis, treatment options, available support services, etc).

Decision-making models facilitate rational thought processes regarding both simple and complex patient care decisions. There are numerous ethical decision-making models currently in use that are appropriate for the clinical setting. However, it should be noted that most decision-making methods are useful only when there is time in which to ponder deeply and weight the alternative courses of action. These models can be extremely useful to the emergency medicine physicians and residents in working out possible courses of action for common bioethical dilemmas (ahead of time) or as tools for dissecting and reflecting on past dilemmas. Careful analyses in advance of emergency situations - as well as self-critical reviews after the emergency has passed - are extremely important.

Josen, Siegler and Winslade developed one such model. They propose that any ethical decision can be made by considering four factors: medical indications, patient preferences, quality of life and contextual features (contextual features include factors such as the wishes of the family, the rules of law,
and the effect a decision will have on others). This model assists in the organization of the health care provider's thought, and helps avoid overlooking any pertinent aspect of the situation (Josen, et al., 1986). Ethical decisions are then made based on the principles of respect for autonomy, beneficence, nonmaleficence and justice. This model, while thorough, may be too time consuming in emergency settings.

However, usual concerns from emergency medicine physicians are not that it is difficult to resolve the dilemmas by use of traditional bioethical principles but rather that the nature of emergency medicine - which demands immediate and often irreversible action - makes ethical deliberation impossible (Iserson, et al, 1986). A calm and detailed consideration of the problem is sometimes considered a “luxury” for which they simply do not have time. While in a sense this is true, it is not reason enough to dismiss the need for ethical reflection - a decision in an emergency situation does not remove it from the realm of ethical evaluation.

But there are occasions in which physicians are confronted with bioethical dilemmas in which they have no time to go through the involved process of most models. In this situation, it is necessary to have a more rapid approach to bioethical decision-making.

Iserson et al have designed a model specifically for the emergency medicine setting. Figure 3 provides this model as a “rule of thumb,” so that even in cases where there is not time to go through a systematic, detailed process of ethical deliberation, there is still something to rely on that is not simply flipping a coin or doing whatever happens to correspond to the feeling in your gut. This approach, while somewhat oversimplified, offers some guidance to those who are under severe time pressures and who wish to make decisions they can live with ethically.

**Figure 3. A Decision-Making Approach When Time for Detailed**
Analysis is Insufficient

Is this a type of ethical problem for which you have already worked out a rule or at least similar enough so that the rule could reasonably be extended to cover it?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow the rule</td>
<td>Is there an option which will buy you time for deliberation without excessive risk to the patient?</td>
</tr>
</tbody>
</table>

Yes

↓

Take that option

No

↓

1. Apply the impartiality test
2. Apply the universalizability test
3. Apply the interpersonal justifiability test


1 Impartiality--the decision-maker is placed in the position of the patient by saying, "Would you be willing to have this action performed if you were in the patient's place?" This test is, in essence, a version of the Golden Rule. By taking the other person's perspective, it is intended to correct for any partiality or self-interested bias.

2 Universalizability—the provider asks himself/herself, "Would you be willing to use the same solution in all similar cases?" This test helps not only eliminate bias and partiality but also shortsightedness.

3 Interpersonal justifiability—the provider considers whether he/she would be willing to defend the decision to others, and to share the decision in public.

In those situations in which there is not time for further deliberation, if all three tests can be answered with some degree of confidence in the affirmative, it is probably best to go ahead and act on the rule or perform the action that satisfies the test (Iserson, et al, 1986). However, acting in this way is only acceptable if every effort is made to review and refine one’s emergency bioethical decision-making when the pressure of the crisis has subsided. In particular, it is crucial to ask whether the decision-making process has served the most basic ethical values.

By making a sincere effort to anticipate recurring types of problems and subject them to ethical analysis in advance and by conscientiously reviewing decisions after they have been made, the
emergency medicine physician/resident can better fulfill his or her ethical responsibilities. The few moments required to assess the bioethical dilemma in this framework may make the difference between an irresponsible decision and a morally praiseworthy one.

Regardless of which decision-making model is utilized, it is critical that all (or as much as possible) necessary information be obtained before a dilemma can be defined and a plan of action implemented. Although necessary, decision-making tools cannot guarantee infallibility any more than they can dictate action. Nor do these models imply that there are single and uncontroversial 'correct' answers to most common bioethical dilemmas in clinical medicine.

In addition to decision-making models, a sound knowledge of frequent bioethical dilemmas that may present in the emergency medicine environment is crucial. To aid emergency medicine physicians, the American College of Emergency Physicians (ACEP) published an Ethics Manual that identifies important moral principles and values common in emergency medicine (Sanders, et al., 1991). The underlying assumption is that knowledge of moral principles and ethical values helps the emergency physician make responsible moral choices. Neither the scientific nor the moral aspects of clinical decision-making can be reduced to simple formulas. Nevertheless, decisions must be made. Emergency physicians should, therefore, be cognizant of the bioethical principles that are important for emergency medicine, understand the process of ethical reasoning, and be capable of making rational moral decisions based on a stable framework of values. As stated earlier and reiterated here, bioethical decision-making should not be viewed as a purely intuitive process. The variety and complexity of the ethical decisions an emergency physician must make are well illustrated by many of the case examples discussed in the ACEP manual. These case examples expand on basic concepts and analytic skills learned early in medical education and reinforce them by giving clinical relevance to the physician. In
addition to aiding in decision-making strategies, this practical emphasis may also strengthen the physician's appreciation for the importance of following an ethical course of action.

We continue to face an increasingly "issue-dynamic" environment (with greater technological impacts and financial pressures) highlighted by a more litigious society with increasing conflicting interests of patients, families, physicians, payers, and public. In this environment, and in order to give patients the best care possible, an effective, defensible, and structured decision-making model is increasingly needed.

**Ethics Committees**

Bioethics committees that are well informed, representative, and motivated can be a healthcare organization's greatest resource for ethical guidance and support. However, without clarity and acceptance of purpose, function, and structure, bioethics committees may not be perceived as a useful source, especially if not readily available.

The efficacy of bioethics committees in relation to emergency medicine currently remains unknown. Historically, bioethics committees have often been unwieldy, lacked a quick response time, and may not have had the clinical expertise to help emergency medicine physicians. Additionally, these committees have typically focused on bioethical problems that arise in chronic care medical patients. Conversely, emergency physicians must deal with acute changes in a patient's health that mandate immediate and often irreversible action without time to review that patient's medical history or even discuss the case with other physicians or family. Although participants in this study rarely utilized a bioethics committee, one individual noted that a "departmental" committee might be useful. Though probably not ideally designed for use in an area such as emergency medicine, ethics committees can positively impact this specialty area by providing "behind-the-scenes" action. For example, in the area
of emergency care, bioethics committees can help to develop policy guidelines, provide ongoing education of staff in models of ethical reasoning, and provide a forum for review of problem cases.

**Ethics Consultations**

A clinical ethics consultation service may perhaps earn greater clinical acceptance and avoid some of the pitfalls of bioethics committees. The most common argument in favor of ethics consultations is that they fit physicians' busy schedules and they cause minimal disruption to the ordinary flow of work.

Ethics consultations appear to have considerable impact on physicians in conducting patient care. Other surveys have indicated that consultations often identified unrecognized bioethical issues, clarified physician's thinking, changed patient management, boosted physicians' confidence, and taught physicians a considerable amount (Perkins & Saathoff, 1988). Furthermore, ethics consultations may have relieved physicians' fears of litigation by teaching the law's tolerance for reasonable medical judgment.

The willingness of practicing physicians to request and consider analysis and advice may depend on the ethics consultant's credibility as a clinician. Many physicians believe erroneously that bioethicists wish to impose single ethical solutions to agonizing dilemmas and are, therefore, understandably hostile. In reality, bioethicists wish to encourage value exploration so that decisions may be challenged, leading in the long run to better decision-making.

In addition to an ethics consultant, legal counsel or a pastoral counselor may also provide valuable expertise in selected cases, though there, as at other times when a clinician asks for assistance, physicians must clarify what kind of assistance they want. Legal advice from a hospital counsel, for example, should not be sought as a substitute for moral reasoning. Such advice, however, can clarify the legal advantages and disadvantages of possible courses of action. Similarly, requesting an ethics
consultation should not arise from a desire to avoid responsibility for difficult aspects of patient care.

Whatever support is requested, bioethics committees should not make the actual decision, but help the physician, patient, and family reach a mutually agreed-on decision. They can also be extremely helpful in assisting to minimize uncertainty and maximize communication.

**Bioethics Education**

The American College of Emergency Physicians (ACEP) has been in the forefront in recognizing the importance of bioethical training in emergency medicine. The ACEP board endorses the concept that emergency physicians receive an appropriate amount of training in ethical decision-making as a Priority Achievement Strategy of accomplishing the mission of emergency medicine (Derse, 1990).

Ethics in emergency medicine may be seen as a 'softer' side of the curriculum. Given that emergency physicians have their own strong ethical values, it may be tempting to give short shrift to bioethics or to think that it can be incorporated into the curriculum with occasional reference. However, bioethics consists of a distinct body of knowledge and a constantly developing literature. It would be a mistake to presume that an understanding of ethics in emergency medicine is something that can be gleaned from the environment. Recognizing this, all North American medical schools are now expected, as a requirement of accreditation, to provide learning experiences in the ethical aspects of medical practice (Spooner, Haight, Emson, & To, 1989).

The teaching of bioethics should have an important place in any physicians' preparation for practice, to sensititize them to ethical issues in patient care, to improve their ability to analyze those issues, and to help them make sound management decisions. However, there is increasing agreement among medical teachers that bioethics should be an on-going process in the education of physicians. To be most effective, bioethics education should be prominently featured and emphasized throughout a
physician’s career since unless continuously re-affirmed, the ethical competence will tend to decline. This requires strong support from all levels of the administration and management.

Teaching bioethics can sensitize physicians to patients’ values and to the conflicts of values that create medical ethics issues in patient care. Another reason to teach bioethics is that all physicians must learn a sound framework for resolving ethical issues. Medical ethics provides the conceptual tools necessary for these clinicians to develop their own ethical decision-making frameworks.

Certainly, it will be a challenge to find ways of imparting bioethics that physicians will find helpful for, and not burdensome to, their clinical development. There are a number of barriers encountered in carrying out such training, most of which can be grouped in six categories: (1) time constraints due to physician's heavy schedules, (2) attitudes of physicians that pose obstacles; (3) logistical problems associated with teaching in the clinical setting; (4) time demands placed on teachers; (5) lack of reinforcement for teaching bioethics; and (6) shortcomings in the background and training of faculty for teaching bioethics in the clinical setting.

There is not a single best formula for ethics education. Bioethics is an integral part both of every clinical interaction and of each physician’s professional and personal identity. If bioethics education is to affect clinical interactions and physicians’ personal identities significantly, it must pervade the day-to-day experiences of the physicians. Many educators now advocate placing more emphasis on "everyday ethics", the issues that routinely arise in daily medical practice, instead of focusing on sensational case, as has traditionally been the case (Fox, Arnold, & Brody, 1995). Hopefully, clinical ethics training will be guided not only by the frequencies of exposures to various ethical situations, but also by the type.

Bedside teaching is clearly the most realistic setting for exploring the ethical questions that arise frequently in the emergency department. A few words to point out the ethical complexities of a situation
are always in order; however, the time constraints and pressures of patient care may make thoughtful reflection, while exploring all viewpoints, an unaffordable luxury. When time and the situation permit, such discussions are invaluable because they can involve not only the patient but also accompanying relatives, to give a family consent. Cases can also be more formally considered in the residency ethics course, as a case-based scenario.

This study provides some initial evidence that ethics education can also improve the confidence of physicians in addressing bioethical problems. However, it can be argued that it is not necessary to demonstrate an effect of ethics education in order to justify teaching ethics, any more than it is necessary to demonstrate an effect of biochemistry education in order to justify teaching biochemistry.

**Limiting Factors**

The survey was somewhat limited for the purposes as expressed herein. As with almost any survey, one may question the motives and appropriateness of the respondents' answers and the editorial control exercised by the author in the formulation of outlines and answer categorizations. There is no objective standard against which to test the validity of the reports of having encountered bioethical dilemmas and it is not known whether the reported behaviors were the same as their actual behavior since recall is an uncertain means of measuring utility or effectiveness. This is a limitation inherent to all surveys using self-reported data.

The size of the sample is relatively small. Nevertheless, the sample of 115 physicians represents a substantial number of those currently working at residency sites for military emergency medicine. Given these considerations, the sample appears large enough to provide a useful indication of some, if not all, of the main difficulties currently being faced in the military emergency medicine setting. Obviously, the spectrum and frequency of bioethics problems may vary in other settings/institutions as
well as the case-mix of patients may differ. Furthermore, learning experiences can vary greatly because of differences in clinical settings and subjective interpretation of events. Personality differences between the physicians also cannot be eliminated as a possible source of bias.

Moreover, the number of providers with courses in medical ethics in college, medical school, residency, or post-residency may cause differences in the ability to recognize and deal with bioethical dilemmas. It is also likely that physicians did not record all bioethical dilemmas even if they had recognized them.

Although the response rate to this survey was better than the rates achieved in similar surveys, the number of non-respondents, the lack of information about whether they differed significantly from respondents, and the non-random selection of programs preclude broad generalizations from the results and the author hesitates to generalize beyond the responses to the survey. It was not possible to obtain any information about non-respondents.

Lastly, the survey itself had limitations. Some specific questions were generated from general guidelines, and there may have been instances where a question did not accurately reflect a guideline’s intent.

All of these limitations may have contributed to the findings and conclusions. However, keeping these limitations in mind, the findings of this study will be presented as an exploration into the largely uncharted territory of bioethical education.
CHAPTER FIVE

CONCLUSIONS

Previously there was no system in place to adequately identify the type of bioethical problems being confronted by military physicians working in emergency medicine departments, nor the frequency in which the dilemmas are occurring. Additionally, the ethical reasoning and decision-making employed by these physicians had not previously been assessed. This lack of research had produced a knowledge gap concerning whether emergency medicine providers in the military healthcare system readily identify and deal with bioethical dilemmas. This study attempted to help narrow this knowledge gap and provide educators with some initial findings on what bioethical dilemmas are being faced and how frequently.

Taking into account the limitations of the survey, some conclusions seem warranted. First, the respondents perceived bioethical dilemmas and decision-making to be frequent in their daily practices. They perceived, too, the need for specific knowledge and skills in dealing with them. The bioethical dilemmas that emergency medicine physicians and residents perceive as affecting them are apparently common and often detrimental, and warrant the attention of physicians, educators, and bioethicists.

Secondly, rapidly occurring advancements in science and healthcare technology are generating new bioethical issues with increasing frequency. The availability of health and illness related information is outpacing knowledge about the best strategies for assisting those who must use this information. Participants in this study rarely utilized structured ethical reasoning or decision-making frameworks. This results in the conclusion that there is a growing need for strategies and frameworks that can be used by healthcare professionals to organize and present clinical information in a way that is usefully supportive.
of the decision-making process and is required of patients and/or their families. The development of decision-making instruments is critical. These frameworks should enable the determination of the best approaches for organizing information, deciding strategies, and facilitating individuals and their families in making clinical decisions. In the absence of such organizing frameworks, or when physicians fail to utilize current frameworks, decisions may actually work against the patient's needs and interests.

The results of this study afford a basis for improving the understanding of bioethical problems among military physicians. The findings of this study support the need for further study to assess the understanding of bioethical issues within the military as a whole and also the effectiveness of hospital ethics committees in meeting the current needs of patients and providers. One of the most important findings of this study is that physicians, based upon their own perceived needs and the needs of the patient, overwhelmingly see the need of formally incorporating biomedical ethics education and consultation into the formal structure of military health care system.

It is also concluded that ethics education can have an impact on physicians' confidence in dealing with, and explaining ethical decisions. This finding is in line with previous studies which have shown that physicians who have had ethics training in medical school feel better prepared to address ethical issues in practice than those who do not.

Findings also support continuing education and research efforts to help physicians feel "more comfortable" in resolving ethical dilemmas including more ethics training in the practical setting through continuing education and in-service courses. The educational experiences must not be abstract, but grounded in the clinical world of the emergency medicine physician.

Additional research should rely on improved methods that generate a larger sample of military physicians and the questionnaire's level of sophistication should be increased to assess the satisfaction of
the care provider with the outcome of the ethical problem and to assess the reluctance of officers to discuss their experiences.

Lastly, more research is needed to understand the relationship between knowledge and virtue to ensure that physicians not only know what is right but also know how to act upon their beliefs. It is hoped that a greater emphasis placed on bioethical deliberations would lead to improved clinical decision-making. This information could help focus ethics education programs on common bioethics problems, help health facility policies address clinically perceived needs, and suggest ways to reduce conflict over bioethics problems. Clearly, there is a need for more discussion of the barriers encountered and how to deal effectively with them.
CHAPTER SIX

RECOMMENDATIONS

It is recommended that medical ethics education be ongoing throughout a physician’s career and be centered on the kinds of moral problems that physicians encounter most frequently in practice rather than on sensational cases of the type that occur only rarely. The education should address several different kinds of learning: the classification of bioethical concepts; the understanding of important decision-making procedures; the ability to apply concepts and the acquisition of certain interactional skills (e.g., the ability to discuss with a terminally ill patient his or her wishes about being placed on Do Not Resuscitate status); and the application of decision-making procedures to actual cases (Culver, Clouser, Gert, Brody, Fletcher, Jonsen, Kopelman, Lynn, Siegler, & Wikler, 1985).

It is recommended that ethics education be increased in military emergency medicine departments and residency programs. Innovative teaching methods are suggested. The most promising educational tool may be the use of case examples. Case analysis, similar to the clinical case method in medicine or law, is an extremely effective method of teaching the underlying principles of bioethics. It is easy to praise ethical principles, but these principles come alive only in the analysis of actual cases. Although there is no firm evidence that formal exposure to issues in bioethics will produce more compassionate and responsible physicians, it makes educational sense to raise sensitivities to moral issues in clinical decision-making and to help clarify physicians’ own ethical beliefs. Patterned education efforts in medical ethics instruction might be better received if proportionately channeled into already identified problematic areas. An obvious purpose of this study is to illustrate the importance that physicians attach to these issues and to serve as a marker for topic and resource allocation. For
example, discussions of the withdrawal of life support (mentioned as a possible dilemma by more than half of the respondents) would appear to be a principal focus for life-and-death discussions. Bioethics topics, however, like other points in most medical subject areas, should be selected for other reasons as well. Instructors would be ill-advised to teach and discuss only the problems physicians identified as common in their specific practice to the exclusion of other issues that are widely recognized because of history, principle, and anticipated future effect.

Specific bioethical issues that are considered important for including into emergency medicine ethics curriculum are futile care, patient competency, informed consent, confidentiality, rights of minors, withholding of care, and dealing with DNR issues. Other suggestions include the need for more formal training in moral reasoning, decision-making, and utilization of available resources in confronting difficult dilemmas.

As stated, the medical ethics curriculum would go considerably beyond the goal of sensitizing physicians to bioethical problems in medicine. It will provide physicians with the conceptual, moral reasoning, and interactional abilities to deal successfully with most of the moral issues they confront in their daily practice. Obviously, bioethics is a complex subject. Although it is possible to teach all physicians enough about it to enable them to manage the bulk of the ethical components of their practice, there will always be difficult cases in which they can benefit by consulting with those who have special training in the field. With this in mind, it is recommended that every physician should have access to ethical consultations for his or her more difficult cases. This consultation should be formalized in hospitals, so those physicians would have an ethics committee or one or more bioethics consultants to whom they could turn.

Bioethical consultation should also be prominent in hospitals that train medical students or
residents, so that physicians become aware of the availability, method, and importance of such consultations. Confronting bioethical dilemmas can be emotionally exhausting to the physician and may, in extreme cases, be detrimental to patient care (Culver, et al, 1985). Use of consultants or recognized local experts to help resolve ethical dilemmas can help alleviate these additional pressures on the physician and lead to a structured, thought-out decision to the dilemma.

Lastly, without strong command and department-wide endorsement, physicians may view bioethics as unimportant. It is extremely important to have the support of the command, the department, and the physician leadership when confronting ethical dilemmas. As stated by T. Rosebury: "Ethical principles are not a luxury; the essence of ethics - concern for the value of man is indispensable for the survival of medicine as a profession and doubtless also for the survival of mankind as a species."
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Wolf, T., Balson, P., Faucett, J., & Randall, H. *A Retrospective Study of Attitude Change During Medical Education.* Journal of Medical Education. 1989, 23: 19-23

Worthley, J. *The Ethical Dimension of Ordinary Professional Life.* Healthcare Executive. Sep/Oct
Dear Emergency Medicine Provider,

I would appreciate your taking a few minutes to read the enclosed material and consider participating in the attached survey concerning bioethical dilemmas and their resolution. For the purposes of this study the operational definition of an ethical dilemma is “a situation in which there is a question of what one ought to do, rather than what is usually done or can be done, and that which requires a resolution of value choices, as opposed to resolving merely factual or scientific matters.”

The survey is being forwarded to all military physicians and residents currently working at emergency medicine residency sites (Army, Navy, and Air Force). By surveying this group of experts, and with your honest responses, I hope to effectively assess the type and frequency of ethical dilemmas being faced in military emergency medicine departments, and the manner in which emergency medicine physicians and residents deal with these dilemmas. Of course, your responses will be absolutely confidential and at no time will individual respondents be identified.

This study will help to identify the critical ethical issues currently being faced in military emergency medicine departments and will enable educational institutions to educate our future emergency physicians in the requisite skills. The research results will be shared with all of our federal colleagues throughout the military health care system.

I appreciate your assistance and thank you in advance for your election to participate in this worthwhile project. For your convenience, I have enclosed a self-addressed envelope in which to return your survey. If there are any questions or need for clarification, please call me at (210) 916-2088 or send an email to: scroggsk@aol.com.

Very Respectfully,

Kendra L. Scroggs
LT, MSC, USN
APPENDIX A-2

Information Paper for Survey Participants

Background Information
The ethical dilemmas that emergency medical physicians and residents perceive as affecting them are apparently common and often detrimental, and warrant the attention of physician educators and ethicists. However, the frequency and type of ethical problems being experienced in day-to-day clinical practice have not been adequately studied, especially in the military emergency medicine arena.

Objectives
This assessment is a project being conducted by LT Kendra L. Scroggs, MSC, USN, an administrative resident of the U.S. Army-Baylor University, Graduate Program in Healthcare Administration, to identify the type and frequency of bioethical dilemmas being faced by military emergency medicine physicians and residents. In addition, the study will assess the reasoning and decision-making models that these physicians employ in resolving the dilemmas. The objective of this study is to extend current knowledge about clinical bioethical dilemmas and their resolution in military emergency medicine operations.

Expert Respondents
Emergency medicine physicians and residents from military facilities with an emergency medicine residency-training program have been selected as the target audience. These sites are recognized as being staffed by respected leaders in the emergency medicine field, providing the military healthcare system with its future emergency medicine physicians, as well as having a close proximity to the latest teaching trends in bioethical education.

How Long Will It Take?
It is estimated it will take fifteen to thirty minutes total time to respond to the survey depending on individual responses. To ensure inclusion in the project, please mail or return the survey no later than 15 December 1999 at the very latest - of course, early replies are much appreciated.

Utility of Results
By participating in this survey, you will play a part in the determination of current new directions in the area of ethics education for military physicians in the emergency medicine arena. It is believed that you will find it interesting to respond to your own and other emergency medicine providers’ input into the project, therefore, each participant will receive a summary report of the survey findings upon completion of the project.

What Will The Results Be Used For?
Compiled results from this study may be used in several ways. First, they can be incorporated into the training plans of the institutions of emergency medicine education as they plan future curriculum development programs. Secondly, using the findings, comparisons will be made to judge and compare various educational styles for effectiveness and efficiency. Lastly, by identifying the frequency and type of ethical dilemmas being faced, executive management, ethics committees, and ancillary staff can identify ways in which to increase support of the emergency medicine team.

For Further Information Contact:
APPENDIX A-3
Survey Instrument

Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

A. Demographic Information

1. Rank: __________

2. Title of current position: ______________________________

3. How long have you been in your current position? ____years, ____months

4. What is the geographical location of your institution?
   NW _______
   SW _______
   Central _______
   NE _______
   SE _______

5. Sex: _______

6. Age: _______

A. Bioethics and the Institution

1. How do you most often identify or recognize an ethical dilemma (rank in ascending order - 1 being the most often used, 8 being the least often used)?
   ____ “gut feeling”
   ____ conflicting values
   ____ the law
   ____ religious training
   ____ patient’s desires
   ____ ethics education
   ____ observation of others
   ____ ethics decision making model - please specify:______________________
   ____ other - if “other” please specify:_________________________________
   ____ I have never encountered a work-related ethical dilemma (go to question 6)

2. In which areas have you been exposed to ethical dilemmas (please circle frequency)?
<table>
<thead>
<tr>
<th>Allocation of resources</th>
<th>frequently</th>
<th>often</th>
<th>sometimes</th>
<th>rarely</th>
<th>never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withholding treatment</td>
<td>frequently</td>
<td>often</td>
<td>sometimes</td>
<td>rarely</td>
<td>never</td>
</tr>
</tbody>
</table>
Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

2. (continued) What ethical dilemmas have you been exposed to (please circle frequency)?

<table>
<thead>
<tr>
<th>Dilemma</th>
<th>Frequently</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawing treatment</td>
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<tr>
<td>DNR orders</td>
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<tr>
<td>Informed consent</td>
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<tr>
<td>Truth-telling or disclosure</td>
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<tr>
<td>Privacy/confidentiality</td>
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<tr>
<td>Action of a colleague</td>
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<tr>
<td>Quality of life</td>
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<tr>
<td>Use of controversial therapies</td>
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<tr>
<td>Futile treatment</td>
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<tr>
<td>Triage</td>
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<tr>
<td>Conflict of interest</td>
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<td>Duty to treat</td>
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<tr>
<td>Rights of minors</td>
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<tr>
<td>Organ donation</td>
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<tr>
<td>Patient competency</td>
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<tr>
<td>Physician/patient privilege</td>
<td></td>
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<tr>
<td>Refusal of care</td>
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</tbody>
</table>

other - if “other” please specify and note frequency: ________________________________

3. Have you ever sought assistance in resolving ethical dilemmas?

   ____ yes
   ____ no (if no, go to question 5)

4. From whom, and how often, have you sought help?

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequently</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional colleague</td>
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<td>Mentor or superior</td>
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<tr>
<td>Religious leader</td>
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<tr>
<td>Spouse / family member</td>
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<td>Lawyer</td>
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<tr>
<td>Ethics committee</td>
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<tr>
<td>Ethics consultant</td>
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<tr>
<td>Military directives</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

other - if “other” please specify and note frequency: ________________________________
Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

5. What was the most often way in which you resolved the dilemmas (rank in ascending order with 1 being the most often, 6 being the least often)?
   ____ acted to maximize good or happiness of the individual
   ____ acted to avoid doing harm to the individual
   ____ acted to benefit others, to include the organization
   ____ acted to benefit myself
   ____ acted to save scarce resources
   ____ did nothing
   ____ other - if “other” please specify: ________________________________

6. Have you had instruction or training in ethics? If so, where (select as many as apply)?
   ____ no, I have not had ethics training
   ____ university/college
   ____ graduate or professional school
   ____ officer courses
   ____ staff college
   ____ war college
   ____ other - if “other” please specify: ________________________________

7. Assign a priority to the following list from greatest importance (1 being most important) to least important (19) as you perceive them within the emergency medicine department:
   ____ allocation of resources
   ____ withholding treatment
   ____ withdrawing treatment
   ____ DNR orders
   ____ informed consent
   ____ truth-telling or disclosure
   ____ privacy/confidentiality
   ____ action of a colleague
   ____ quality of life
   ____ use of controversial therapies
   ____ futile treatment
   ____ triage
   ____ conflict of interest
   ____ duty to treat
   ____ rights of minors
   ____ organ donation
   ____ patient competency
   ____ physician/patient privilege
   ____ refusal of care
____ other - if “other” please specify:______________________________
Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

8. Should bioethics be a component of Continuous Quality Improvement (CQI) helping to improve quality in health care delivery in your institution?
   ____yes
   ____no
   ____undecided

9. Do you already consider bioethics as part of CQI in your institution?
   ____yes
   ____no
   ____do not know

10. Does your institution have an ethics committee?
    ____yes
    ____no
    ____not sure

11. Do you perceive a need for an ethics committee at your institution?
    ____yes
    ____no

12. Have you ever served on an ethics committee?
    ____yes
    ____no

13. Do you feel your training has prepared you to adequately address ethical problems?
    ____yes
    ____no

14. Are you pleased with your ethical development and knowledge?
    ____yes
    ____no

15. Do you feel comfortable with your ability to recognize and address ethical problems?
    ____very comfortable
    ____somewhat comfortable
    ____not comfortable
Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

16. Do you feel comfortable in explaining your ethical decisions?
   ____ very comfortable
   ____ somewhat comfortable
   ____ not comfortable

17. Do you think you need more ethics training?
   ____ yes
   ____ no

18. In your opinion, how often have ethical dilemmas affected your productivity?
   ____ frequently
   ____ often
   ____ sometimes
   ____ rarely
   ____ never

19. Do you utilize any specific decision-making model in confronting ethical dilemmas? If so, please describe?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
Identification of Bioethical Dilemmas, Ethical Reasoning, and Decision-Making Experienced in Military Emergency Medicine Departments

20. In your opinion, what are the three most troubling dilemmas that you have experienced in emergency medicine?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Thank you for your input, your time and your assistance!
## Appendix B

**Troublesome Bioethical Dilemmas Reported by Physicians**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do-not-resuscitate orders</td>
<td>35</td>
<td>13.89</td>
</tr>
<tr>
<td>Futile care</td>
<td>22</td>
<td>8.73</td>
</tr>
<tr>
<td>Allocation of scarce resources</td>
<td>16</td>
<td>6.55</td>
</tr>
<tr>
<td>Patient competency</td>
<td>12</td>
<td>4.76</td>
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<tr>
<td>Confidentiality</td>
<td>11</td>
<td>4.37</td>
</tr>
<tr>
<td>Rights of minors</td>
<td>10</td>
<td>3.97</td>
</tr>
<tr>
<td>Conflicting wishes of family members and patients (incompetent and not)</td>
<td>8</td>
<td>3.17</td>
</tr>
<tr>
<td>Refusal of care</td>
<td>8</td>
<td>3.17</td>
</tr>
<tr>
<td>Withholding of care</td>
<td>8</td>
<td>3.17</td>
</tr>
<tr>
<td>Abuse and/or unreasonable demands from patients and families</td>
<td>7</td>
<td>2.78</td>
</tr>
<tr>
<td>Lack of adequate support (command/admin/ancillary support/other providers)</td>
<td>7</td>
<td>2.78</td>
</tr>
<tr>
<td>Patient privacy</td>
<td>7</td>
<td>2.78</td>
</tr>
<tr>
<td>Withdrawal of treatment</td>
<td>7</td>
<td>2.78</td>
</tr>
<tr>
<td>Access to care</td>
<td>6</td>
<td>2.38</td>
</tr>
<tr>
<td>Disclosure / delivering bad news / truth-telling</td>
<td>6</td>
<td>2.38</td>
</tr>
<tr>
<td>Life saving versus religious beliefs (I.e. Jehovah Witness/withholding of blood)</td>
<td>6</td>
<td>2.38</td>
</tr>
<tr>
<td>Quality of life</td>
<td>6</td>
<td>2.38</td>
</tr>
<tr>
<td>Informed consent</td>
<td>5</td>
<td>1.98</td>
</tr>
<tr>
<td>Unable to get follow up care for non-Prime patients</td>
<td>5</td>
<td>1.98</td>
</tr>
<tr>
<td>Abuse of Emergency Department with non-emergent problems</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Against Medical Advice departures</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Controversial therapies</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Discharging patients to uncertain follow-up</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Emergency contraception/morning after pills</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Procedures on the newly dead</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Termination of care</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Triage</td>
<td>4</td>
<td>1.59</td>
</tr>
<tr>
<td>Abuse/rape cases</td>
<td>3</td>
<td>1.19</td>
</tr>
<tr>
<td>Lying to consulting physicians, insurance, etc to obtain best care for patient</td>
<td>3</td>
<td>1.19</td>
</tr>
<tr>
<td>Treating substance abusers/violent patients/patients who inflicted harm on others</td>
<td>3</td>
<td>1.19</td>
</tr>
<tr>
<td>Withholding information</td>
<td>2</td>
<td>0.79</td>
</tr>
<tr>
<td>Accountability of primary care providers (dropping the ball)</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Addressing the spiritual component of each patient</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Analgesia for pain while awaiting surgery</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Demands of career versus demand of family</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Drug seeking behaviors versus real pain syndromes</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Emtala regulations versus patients financial obligations</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Explaining to patients how mistakes made by trainees will affect them</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Interaction with law enforcement</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Interaction with other specialties (what's best for patient)</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Involuntary commitments</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Supervising residents/medical students in a busy ER</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Organ procurement</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Patient care versus demands on residents</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Pediatric codes</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Treatment of civilians in military operations</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Triage in disaster or military operations</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Values conflict</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

100%
## Appendix C

### Bioethical Decision-making Models Used by Participants

<table>
<thead>
<tr>
<th>Cited &quot;Decision-making Models&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deontological model: balancing various values of beneficience, nonmalefience, informed consent, appropriate resource allocation, and privacy.</td>
</tr>
<tr>
<td>2. Do no harm (nonmalefience); Advocate for life (without prolonging death); Respect each person as a valuable human being; and when in doubt consider what Jesus would do.</td>
</tr>
<tr>
<td>3. &quot;The Golden Rule&quot;: Do what I would want have done to me or other loved ones in the same situation?</td>
</tr>
<tr>
<td>4. Look at the facts of the case and the values at risk; Determine what the principle conflicts are between values; Look at professional norms, and between ethical axioms; Review rules and principles; Decide possible courses of action; Examine which values and ethical principles would each course of action protect or infringe; Decide course of action; Defend course of action.</td>
</tr>
<tr>
<td>5. Is it the right thing to do - does the patient want it?</td>
</tr>
<tr>
<td>6. Utilize my own morals and beliefs which I hold to be true and consistent with community norms.</td>
</tr>
<tr>
<td>7. Never violate my ethical oaths or standards. When possible use legal status or instruction and when feasible look to the best interest of the patient, family, &amp; institution.</td>
</tr>
<tr>
<td>8. Look at patient chart, standard operating procedures, instructions. Use legal knowledge. Consult with patient, family, friends, and primary physician about best options.</td>
</tr>
<tr>
<td>9. Use personal belief system with awareness of others beliefs and cultural backgrounds.</td>
</tr>
<tr>
<td>10. Use standard of biblical principles with second priority being the request of the patient and institutional protocols.</td>
</tr>
<tr>
<td>11. Try to be a utilitarian based physician.</td>
</tr>
<tr>
<td>12. Utilize own belief in what is right or wrong. (&quot;You cannot teach ethics. Ethics are beliefs of right/wrong. Each case is different. Most of the courses and lectures are worthless. You can teach the &quot;policy&quot; and the &quot;law&quot;, but this may be different than your own values, beliefs, and ethics&quot;).</td>
</tr>
</tbody>
</table>