Ethical Concerns for Physicians Deployed to Operation Desert Storm

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ABSTRACT

1. Objective. To ascertain ethical concerns of active duty military physicians deployed to the Persian Gulf during Operation Desert Storm. **2. Design.** Survey, conducted upon return to the United States and Europe. **3. Setting.** Active duty military physicians from multiple specialties deployed to serve in a combat zone before, during, and after a war. **4. Participants.** Anonymous and confidential sampling of active duty physicians identified by their command as having participated in Operation Desert Storm. Sampling was population based with voluntary compliance. **5. Interventions.** None. **6. Main Outcome Measures.** Responses to a questionnaire. **7. Results.** The response rate was 360 of 600 questionnaires mailed (60%). Responses represented physicians assigned to units in Saudi Arabia, Kuwait, and Iraq, from the front lines to the rear area evacuation hospitals. Eighty-four percent stated that they were familiar with the Geneva Convention of 1949 outlining care of enemy wounded and civilian populations. However, 27% stated that they did not apply to their practice in the Persian Gulf War. Greater than 33% disagreed with medical need as the sole determinant for care in a triage scenario. Greater than 20% stated that enemy prisoners of war should receive care only after Allied Forces had ben treated. Supply and resource allocation issues were reported by nearly half of these physicians, including the need to ration health care. The moral utility (versus futility) of medical efforts during war was contemplated by 37% of physicians. **8. Conclusions.** Physicians deployed to the Persian Gulf during Operation Desert Storm dealt with a number of issues raising concerns over the ethical practice of medicine during and after war. Many of these issues parallel those observed in the clinical practice of medicine in the United States, including access to care and triage, balancing goods and harms, resource allocation, and the definition of medical futility.

INTRODUCTION

The period of time from the close of the Vietnam War to the present has seen an evolving emphasis on the ethical aspects of clinical medicine in the United States and other western countries. Landmark cases such as Karen Quinlan, Joseph Saikewicz, Baby Doe, and Nancy Cruzan have marked the course of medical ethics deliberations in the U.S. over the past 15-20 years. Within the practice of peacetime military medicine, issues in medical ethics have received attention similar to that in the civilian sector[1,2]. Potentially unique dilemmas for military physicians have also been addressed[3,4].

During the recent Persian Gulf War, activities in which U.S. military men and women involved in Operations Desert Shield, Desert Storm, and Provide Comfort took part provided a unique opportunity to investigate the ethical concerns of health care professionals posed by precombat, combat and post-combat operations in a foreign country. As the largest military operation since the Vietnam War, more service-members, including health care professionals, became actively involved in the rapid preparation, deployment, and operations of massive combat forces, complete with logistical and medical support. These individuals dealt with problems ranging from desert training and readiness to defensive maneuvers, offensive operations, and humanitarian actions amidst vastly different cultures in foreign countries. Concomitantly, many of these individuals dealt with real or perceived ethical dilemmas, not unlike those of previous wars.

While deployed during Operations Desert Shield and Desert Storm, it became the author's intent to assess how ethical issues commonly encountered in the practice of modern medicine might be dealt with in the context of war. A review of the recent medical literature upon return to the United States failed to yield any such analysis following recent wars or armed conflicts. This report gives the results of a survey, conducted within 6 months of the physicians' return. The survey was directed at 1) ascertaining ethical concerns of military physicians and physician's assistants (PAs) deployed to the Persian Gulf during Operations Desert Storm, and 2) determining if these

physicians and PAs gave consideration to, and dealt with, ethical issues that paralleled those found in peacetime medicine.

METHODS

Unfortunately, there was insufficient time to prepare and test a formal survey tool prior to deployment, or gather objective data prospectively throughout Operations Desert Shield, Desert Storm, and Provide Comfort. The author did make observations of his own experiences and after returning to the United States developed a questionnaire for military physicians and PAs deployed to the Persian Gulf. This questionnaire anonymously addressed the assignments, locations, and patient encounters of respondents. The respondent's familiarity with, and perceived applicability of, the Geneva Conventions pertaining to health care issues and care of Enemy Prisoners of War (EPWs) was also determined. A number of questions subsequently addressed the respondents' thoughts on triage (given real and hypothetical scenarios), perceptions of supply and resource allocation problems, training and preparation for nuclear-biological-chemical (NBC) casualties, and their own personal or professional concerns about their role as a health care provider in war.

The questionnaire was mailed to 600 Army and Navy active duty physicians and PAs in November of 1991. Interestingly, no central office within any branch of the military could generate a list of physicians deployed to the Persian Gulf. Consequently, there was no single mailing list. Questionnaires were forwarded to individual commanders of all Army community hospitals, clinics, and medical centers in the United States and Europe which deployed physicians to the Gulf, and to the commanders of the four Navy Regional Medical Centers in the United States, which supplied Navy physicians to staff a Fleet Hospital, 2 Naval Hospital ships (USNS Mercy and USNS Comfort), and Marine ground forces. Distribution within each institution was independently conducted by the respective command. The survey was anonymous and confidential in that respondents' names, unit they served with in the Persian Gulf, and current duty station were not solicited. Compliance was voluntary. This sampling was incomplete as some Medical Corps officers had terminated service and many others had experienced a change in duty station since their return from the war. Reserve component physicians were not surveyed.

Results of the survey were tabulated upon returns of the mailing in January 1992. There was no second mailing. No effort was made to contact nonrespondents. Responses to individual questions were interpreted in relation to the total number of returns and are reported in a descriptive manner.

RESULTS

Of the 600 questionnaires mailed, 360 were returned (354 from physicians) for a response rate of 60%. Questionnaires were received from five of the seven major medical centers in the Army and all four Navy Regional Medical Centers, as well as 24 Army community hospitals and clinics. Individual responses also came from military units in the U.S. and Germany.

The types of units to which respondents were assigned varied and represented every level of military health service support in the Persian Gulf (Figure 1). Physicians assigned to Army Divisional units (Battalion Aid Stations, or Medical Clearing Companies) constituted 39% of respondents. Those in Corps level facilities (Mobile Army Surgical Hospitals, Combat Support Hospitals, Evacuation Hospitals, or Field Hospitals) accounted for 43% of respondents, and another 11% were from the two Navy hospital ships, Fleet Hospital or Marine units. The remaining 7% were from physicians assigned to host nation hospitals or largescale health service support planning and coordinating activities.

Ninety percent of all respondents operated out of units assigned to locations in Saudi Arabia at some point during their tour. Other permanent operational areas included Bahrain (4 respondents) and Turkey (1 physician).

Eight percent (30 respondents) operated out of Navy hospital ships. Forty-nine percent of respondents conducted operations in Iraq, and 16% in Kuwait. Types of patient encounters were recorded for 90% of respondents and included those with Saudi Arabian civilians, Saudi and other Arab Coalition Forces, Kuwaiti and Iraqi refugees, U.S. and Coalition casualties, and Iraqi EPWs **(Table 1)**.

When asked if they were familiar with the 1949 Geneva Conventions outlining care of enemy wounded and civilian populations, 84% of respondents indicated they were familiar with the guidelines and 60% stated they had actually read the Geneva Conventions documents. However, when asked if they believed that these international agreements applied to their practice in Operation Desert Storm 27% stated that they did not apply to their mission. Another 10% were uncertain as to the relevance of these conventions in their particular practice setting.

Thirty-three and one half percent of respondents disagreed with the statement "The only criteria used for triage should be medical status [need]". A follow-up question inquired whether EPWs "no matter how severe their injuries, should only be treated after all Allied Forces are treated"? Twenty-two percent of respondents agreed to this plan, one which clearly is contrary to the guidance of the Geneva Conventions, the published "Priority of Care" documents circulated by Allied Forces prior to combat operations (during Operation Desert Shield), and the generally accepted philosophy of western medicine where triage is based solely on severity of illness.

Given a hypothetical situation of a mass casualty in which Allied Coalition Forces, civilian refugees, and Iraqi EPWs presented to a medical treatment facility for treatment of the same medical/surgical condition, most respondents indicated their intent would be to treat all patients individually, based upon medical need regardless of national or political affiliation. Recognition was made, however, of limited resources (expendable equipment, medication, beds, fuel and water) and evacuation capabilities which were perceived to negatively impact upon their ability to render what they considered equitable, appropriate, and uniformly accessible care. The limited nature of the war and resultant treatment scenarios did not give opportunity for this hypothetical dilemma to develop.

Adequate supplies were felt to have been a problem by about 47% of respondents. These physicians were located at virtually every tier of the health service support system, from the front lines rearward including the large evacuation hospitals. A surgeon assigned to a 200 bed Combat Support hospital commented that "had the conflict been longer or more intense, rationing of health care would have been necessary". Others felt that "rationing" was an everpresent phenomena of war in their setting. Particular items felt to have been in short supply by some of these physicians included surgical packs and dressings, suture material, antibiotics, IV fluids, casting material, and water. However, 44% of respondents stated that they were adequately supplied for treating their anticipated Allied Coalition casualties and any additional civilian and EPW patients. Over 83% of respondents indicated that their unit commanders supported the concept of using their own medical supplies to treat all three categories of patients.

Seventy-two percent of respondents indicated that they had completed the Army's Medical Management of Chemical Casualties Course, a course given over a period of days addressing the mechanism of action of chemical warfare agents, defensive measures to be taken against them (including the use of protective clothing, gas masks, and pharmacologic agents), decontamination procedures, and specific antidotes and treatments. Nevertheless, half of all respondents expressed that they did not feel adequately prepared to treat chemical warfare casualties. Most realized that multiple trauma compounded by chemical contamination or toxicity would encumber their decontamination and evacuation capabilities, and have a profound impact on triage of all casualties. One Division Surgeon noted "we knew what to do but would never get the people or water or trucks to do it". Sixty-five percent of respondents stated that they did not believe their medical units were adequately supplied for the

potentially largescale decontamination requirements a chemical mass casualty situation would require.

One hundred-forty of the returns contained additional comments and observations. Many physicians expressed frustrations with the command and communication channels they were required to work with. Desert life was not easy, and interpersonal, or lifestyle, issues were raised. While some physicians shared respect and responsibility in various positions of leadership and planning, others were made to feel less important and not even given the respect due their rank and professional status. Supply problems, cited by many others, were perceived to have negatively impacted upon medical capabilities. And some claimed that their real capabilities were misrepresented to the press; that they were asked to do more than was truly possible. These feelings raised questions of guilt in some physician's minds, futility of care in others. Thirty-seven percent of respondents stated that they, either individually or collectively with other health care providers, dealt with issues addressing the moral utility of wartime medical efforts during their deployment.

Perhaps one of the most difficult adjustments for any physician to make in preparation for war is that of determining the appropriate standard of care in a given environment with limited resources. That standard by which western physicians are accustomed to practicing, especially in the United States, cannot be approximated in a wartime scenario. It proved difficult for most respondents to accept the limitations of the austere utilitarianism which the desert environment and war imposed upon them. Given a different progression of the war, greater casualty load, or use of chemical warfare agents, many expressed concerns that their efforts might be construed as futile. None relished the thought of overwhelming mass casualties, diminishing supplies, an overburdened and protracted evacuation chain, or chemical contamination.

The humanitarian mission of providing medical care to Kuwaiti and Iraqi civilians and Iraqi EPWs was variably granted to different units depending on their location and contact with these populations. Physicians perceived a number of issues to be troublesome in providing this care including the availability of supplies, the sometimes apparent futility of limited care, the withdrawal of units from areas where needs still remained, and issues around separation and repatriation of patients evacuated from Iraq or Kuwait to Saudi Arabia. Certainly the overall devastation of war, especially on civilian populations, contributed to many military physicians being frustrated in their ability to make a difference in the region.

DISCUSSION

Physicians deployed to Operation Desert Storm dealt with a number of issues raising concerns over the ethical practice of medicine during and after war. Some issues revolved around the professional conduct and ethical behavior of military officers, physicians, soldiers, and patients. Respect for persons, truth telling, and confidentiality are guiding rules which may assist physicians in dealing with these issues. All physicians should be familiar with these rules and how they apply in the practice of medicine. Discussion of those conditions, or superseding principles, which may affect their utility in the context of war should be pursued by physicians in the military (active duty or reserve).

A number of concerns expressed by respondents to this survey parallel those in the practice of clinical medicine. Physicians had to balance goods and harms; that is, determining the best for their patients, be it immediate or delayed treatment, air or ground evacuation, continued service with the patient's unit or evacuation out of the combat zone, while weighing the potential harms...utilization of scarce resources, adverse effects on morale, and diminishing the effectiveness of the fighting force. Additionally, physicians were instrumental in resource allocation. This was perhaps most apparent in the more forward (frontline) positions where equitable distribution of expendable goods and medicines, litters, beds, evacuation capabilities, medical personnel, and services became crucial in extending

medical logistical support to massive numbers of soldiers positioned over a huge desert frontier.

Futility of care, whether due to limited resources and interventions, overwhelming patient condition, or perceived military or political constraints on humanitarian actions, was another concern of physicians responding to this survey. Consider the comment made by one physician in a semi-permanent surgical hospital in a major Saudi Arabian port: "Decisions on who to evac without medical support, which would equate with death, and who should utilize the limited ventilator and ICU support facilities...was never addressed. With large numbers of casualties, the life or death decision of who would receive support was left to the individual [provider]. The moral quandary of who to choose to save, with equally salvageable injuries, was thankfully not necessary to resolve."

Discussions of medical futility have become more prominent today in community hospitals, tertiary medical centers, and academic centers. The fact that wartime conditions have raised these questions is not new. Nevertheless, it begs attention in both the military and civilian context. Those responding to this survey may well have recognized that in the context of wartime medical care, limited resources, and a pervasive utilitarian philosophy, determinations of medical futility may be influenced by factors outside the strict professional medical opinion. What is medically "right" or desirable may not be feasible in certain situations. Even the calculations of probable outcomes, given a certain medical condition, can be skewed by such a context, and the improbability of a good outcome affect the determination of futility.

Finally the carnage of war, brutality of man against man, and resultant needs for largescale humanitarian relief struck many physicians in the Persian Gulf War, as has been the case throughout history. Three observations made by different physicians are given in closing which illustrate some of the morally unsettling situations physicians were called upon to deal with.

"I was moved when I found myself in the position of consoling a Battalion Surgeon, who worked forward of me in an artillery battalion, that his inability to save a soldier who suffered fatal wound from an antipersonnel mine should not be taken as any reflection of his capabilities as a physician. He had just finished his internship prior to being deployed to Operations Desert Shield and Desert Storm; I was a neonatologist."

"Regarding the Geneva Convention, none of us [physicians at an evacuation hospital] believed the enemy would honor it. Most medical staff...would have rather fought and died than surrender and be taken prisoner. As a woman, I certainly would not have passively agreed to surrender...Perhaps fighting an enemy who hadn't proved to be such savages would have made us think differently."

"We had a difficult time remaining objective toward the EPWs once we saw the massive numbers of women and children slaughtered by the [Iraqi] Republican Guard. Toddlers were stabbed repeatedly...once we saw this, the EPWs were treated (emotionally) with some distance. Appropriate medical care was never withheld, however."

CONCLUSION

The results of this survey of physicians and PAs deployed to the Persian Gulf during Operation Desert Storm indicate that many of the ethical issues facing physicians in the peacetime practice of medicine are encountered in war. Prominent issues include access to care and triage, balancing goods and harms, resource allocation (distributive justice), determining the standard of care appropriate for the population, environment and wartime context, accepting the limitations of austere utilitarianism, and the definition of medical futility. Ethical considerations such as these are not unique to military physicians, and their thoughtful analysis would seem beneficial for all physicians.

Many issues raised in this survey dealing with professional training and conduct, communications, and logistical support have been identified through numerous after-action critiques conducted through the military. Programs are

currently in progress to address or correct some of the problems which were identified. While this report may be considered representative of physicians deployed to the Persian Gulf, it does not include data from every physician. The additional areas of concern identified from this study have implications for all physicians called to serve in a wartime setting. These issues are largely non-self-serving and warrant attention in graduate and continuing medical education programs.

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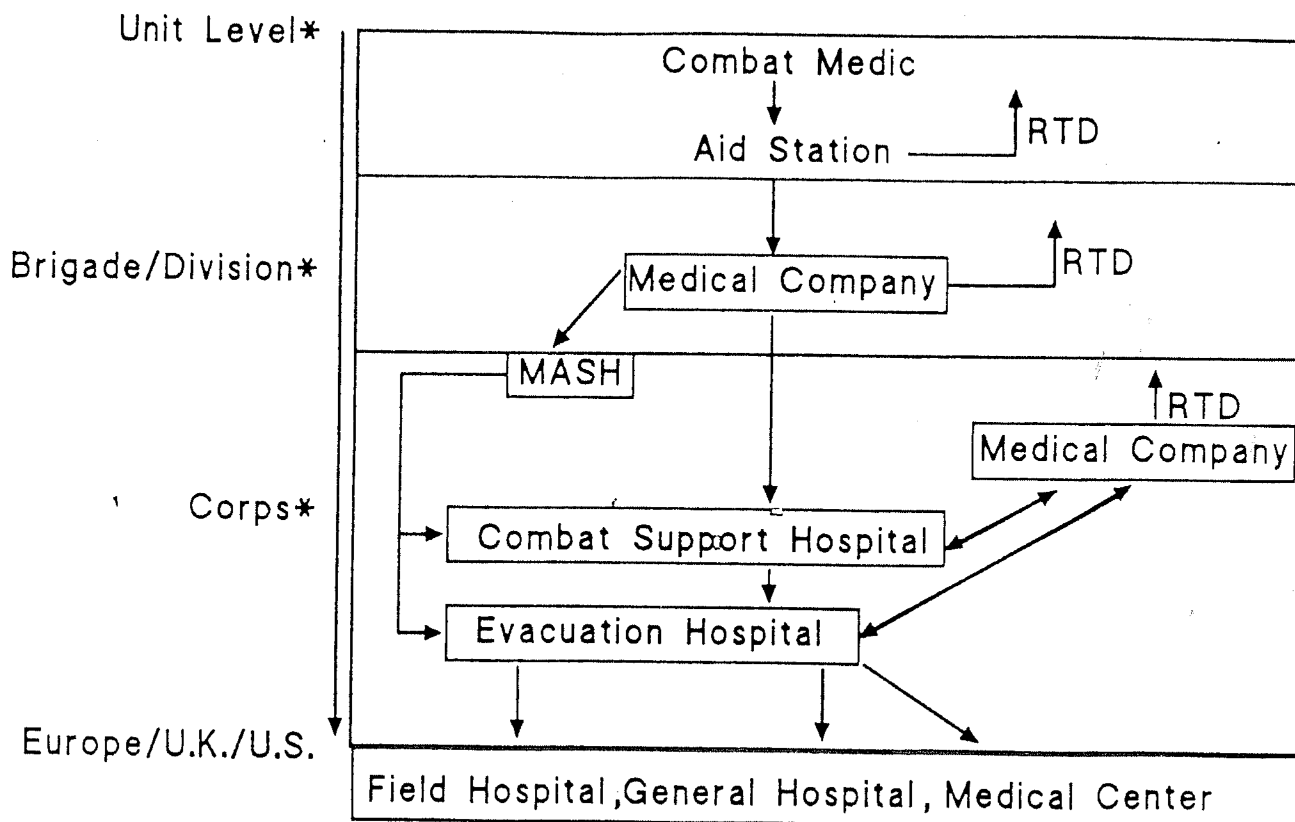
TABLE 1. Types of patients treated by 354 physicians and 6 PAs responding to survey.

Total number of respondents treating any patients	90%
Patient Categories	**Percentage of physicians encountering patients from each category**
Saudi Arabian Civilians	38%
Allied Coalition Soldiers	38%
Kuwaiti Civilians	23%
Iraqi Civilians	51%
Coalition Combat Casualties	80%
Iraqi EPWs	70%



Legend for Figure. Patient flow from the front line (combat) units to the rear areas is illustrated with increasing levels of care noted. Arrows depict direction of flow; RTD indicates "return to duty" of soldiers who have received care. Medical Company - 40 to 60 beds, advanced trauma life support and brief holding capability; no surgery. MASH - Mobile Army Surgical Hospital (60 bed). Combat Support Hospital - 200 bed, surgery provided, medical/surgical ICUs. Evacuation Hospital - 400 bed, medical/surgical including subspecialists. Field Hospital - 300 bed, long-term recuperative care. General Hospital - 1000 beds, these beds were provided by the USNS Comfort and USNS Mercy in the Persian Gulf area, and fixed hospital facilities in Europe. Medical Center - tertiary care, full service hospitals in Europe and the U.S.