The Dynamics and Ethics of Triage: Rationing Care in Hard Times

Guarantor: MAJ Thomas B. Repine, MC USA
Contributors: MAJ Thomas B. Repine, MC USA*; COL Philip Lisagor, MC USAR†; COL David J. Cohen, MC USA‡

Triage of medical care, whether necessary because of routine daily limitations or forced by exceptional circumstances, such as for soldiers injured in combat or civilians in mass casualty situations, is increasingly coming under scrutiny. The decisions that limit access to fundamental and even life-or-death treatments are fraught with controversy. These decisions are difficult for the medical provider to make and are even more difficult for the patient to understand. Medical providers are poorly trained to address the numerous factors involved in triage decisions under the pressure of limited time. Patients are understandably selfish and short-sighted regarding their own care. Both provider and patient can feel that triage is immoral. In contrast, when triage is taught proactively and reviewed relative to the situation, the ethical principles that guide triage are evident and intact. Both provider and patient must learn the considerations and consequences of triage.

Introduction

Combat, combat medical care, and triage are dynamic processes. Ethics is too, although the ethical principles themselves are not. During a time of war, and after an attack such as that on September 11, 2001, the need for all physicians and the community at large to learn about the process of triage and the surprisingly dynamic ethics around it could not be more evident.

When the demand for medical care exceeds the ability to provide it, care must be rationed. Chronic medical care has always operated on some basic premise of rationed care. The sickest patients are always treated first. This is obvious in emergency rooms across the United States and is just as prevalent, although not as obvious, in the daily decisions of all physicians. On a larger scale, the rationing of care has driven the emergence of health maintenance organizations (HMOs).[1] Even ignoring their financial motives, the triage of resources followed by such organizations has been increasingly and publicly challenged.

People in the United States believe that medical care is a right. In fact, only prisoners have a right to health care. This technical misunderstanding aside, our society still views individual health care as at least an entitlement and not a privilege. This sense of entitlement leads to conflicts between patients, who are unwilling to settle for less than maximal care, and physicians, who must determine who can realistically receive care. The expectation that every patient can be treated in every situation cannot be met. We are faced, as a community, with deciding how we will divide the precious medical resources to do the most good for the most people.

Physicians in this uncomfortable position have typically deferred decisions of "who gets what" to inner personal judgment. These decisions are understandably fraught with controversy, because the motives behind them are not always clear to people inside, let alone outside, the situation. Compounding this ambiguity is the fact that there has been insufficient training, minimal oversight, and little formal discussion regarding basic ethical concerns such as fidelity, veracity, justice, autonomy, and even beneficence, to ensure that these principles are being addressed in these extreme circumstances. These ethical principles are just as important, if not more important, in triage situations in which decisions can affect life and death. Arguably, however, when the practice and principles of triage are examined within the context of the situation in which it is used, these ethical principles become evident as the foundations on which triage decisions are actually made.

Background

Before any discussion regarding the ethics of triage can be undertaken, we must understand the mechanics and typical driving factors involved. Triage is derived from the French word *trier*, which means to choose among several.[2,3] It is a military term in origin, being used to describe the prioritization of wounded soldiers and the use of available medical resources for maximal efficiency. Commonly recognized examples of triage include (1) prehospital, (2) catastrophic, (3) emergency department, (4) intensive care, (5) waiting list (e.g., for lifesaving treatments such as organ transplants), and (6) battlefield situations.[4]

Battlefield triage is divided into two main scenarios that represent two ends of a spectrum of medical care: (1) when the number of patients and the severity of their injuries do not exceed the capability to render care and (2) when the number of patients and/or the severity of their injuries do exceed this capability.[5] In the first type of situation, patients with the worst injuries are treated first. Individual patients normally recognize that their sprained ankle should wait when the doctor is treating a patient with a heart attack. Without this understanding of the bigger picture, some patients do not accept waiting and few, if any, accept being denied care if acutely ill. Again, anyone who has waited in an emergency department waiting room is intimately familiar with this common perception.

In the United States, few civilian catastrophes have come close to overwhelming the availability of immediate medical care and altering the perception that anyone who needs immediate medical care will get it. The massacre at Columbine High School, the Oklahoma Federal Building bombing, and even the September 11 attacks represent some of the most extreme examples of civilian triage situations, but they still are examples of the first

*Department of Hematology/Oncology, William Beaumont Army Medical Center, El Paso, TX 79920, and 31st Combat Support Hospital, Baghdad, Iraq.
†Department of Surgery, University of Nevada School of Medicine and Reno Veteran's Hospital, Reno, NV 89502, and 2nd Medical Brigade, Baghdad, Iraq.
‡Department of Cardiothoracic Surgery, University of Texas Health Sciences Center, San Antonio, TX 78233, and 86th Combat Support Hospital, Baghdad, Iraq.
The views expressed in this article are those of the authors and do not necessarily represent those of the Army or the Department of Defense.
This manuscript was received for review in February 2005 and was accepted for publication in March 2005.

scenario, in which capacity is not exceeded. In these situations, it seems commonly inappropriate to both physicians and patients that a severely injured individual, no matter how severely injured, be skipped in preference to other patients because of limited medical resources. There is no perceived shortage of medical assets or ability to provide care; therefore, it truly is not appropriate. Unfortunately, this was true for September 11 only because the number of wounded casualties was much lower than the number of those who were killed.

What happens when physicians and patients are placed in situations more like the second triage scenario is far less frequently encountered and much more ethically challenging. In this second type of situation, patients with the greatest chance of survival with the least expenditure of time, equipment, supplies, and personnel are treated first.[6] This situation occurs when the numbers of patients and the severity of their injuries quickly overwhelm routine medical assets. It is especially prevalent when resources are limited by being in a theater of war, and thus it may be more familiar to military physicians than their civilian counterparts.

In more desperate situations, triage is used differently. At a combat support hospital (CSH), patients are triaged in priority of evacuation to the hospital, their care at the hospital, and even their evacuation and disposition from the hospital. Patients are also sorted into the categories of immediate, delayed, minimal, and expectant, based on their expected prognosis. All of this is typically done by one individual, the triage officer. The triage officer acts as a gatekeeper, restricting access to precious limited medical personnel and resources. The person doing triage should primarily be looking for a group of patients who have an urgent threat of loss of limb, eyesight, or life if not cared for immediately and, at the same time, have a reasonable chance of being successfully treated. Examples of immediate patients include those with an acute airway problem, a tension pneumothorax, or severe bleeding from a readily accessible source, such as a splenic wound or hemorrhaging extremity blood vessel. In general, patients with high physiologic trauma scores and low anatomic trauma scores are ideal candidates for classification as immediate patients.[7–9]

Delayed patients might include patients with soft tissue fragment injuries or abdominal wounds who are in hemodynamically stable condition. They should represent the largest group of injured patients in any situation, but this is not always the case.

Minimal patients are also known practically as the "walking wounded." These individuals are able to help with their own care and can even help with the care of their comrades if necessary. They can wait for appropriate medical care and must wait so that those who need care more immediately can be treated first.

Although the immediate patients may have the most immediate medical concerns, the minimal patients may sometimes be the most important patients, depending on the tactical situation. These are the soldiers who can return to the fight with minimal effort. This would be more important than medical reasons for triage if, for example, an enemy force is imminently threatening to overtake friendly forces. Under those conditions, these soldiers must be treated first, to return to duty and continue the mission, regardless of the injury priority and even with likely adverse outcomes for other patients. More commonly, minimal patients sometimes need to be treated before immediate patients when the sheer numbers of minimal injuries impede the flow of patients and the availability of medical personnel to continue triage itself. At the 31st CSH, it is not uncommon for 20 to 30 patients to show up in a matter of minutes, pouring out of helicopters and "humvees" and flooding the emergency department with bodies.

Expectant patients are a foreign concept to most physicians and an unpalatable subject to the community at large. Patients with severe trauma, with both high physiologic trauma scores and high anatomic trauma scores, are good examples of expectant patients. Casualties with a penetrating gunshot wound to the head and exposed brain tissue or multiple mutilating traumatic injuries with shock are simply more common in war than in civilian trauma. These patients have minimal chances for any meaningful survival without heroic efforts, and sometimes despite heroic efforts. Casualties may also be classified as expectant if their care would prevent patients with more straightforward and urgent conditions from receiving care.

Discussion

Erroneously, combat triage is frequently interpreted too simplistically as only a process of sorting and ordering the patients according to injury severity; however, this does not consider the numerous factors influencing each controversial decision or the allocation of additional care once patients have been categorized. The reason why senior surgeons are most qualified to be the triage officer is that they must also predict and judge how to proceed with the treatment of the patients after they have been prioritized.[6] This ensures that the most benefit can be obtained with the use of limited personnel and material resources, including blood, fluids, radiology studies, intensive care unit beds, and operating room capabilities.

All of the factors that must be considered in making triage decisions are controversial. The categories of immediate, delayed, minimal, and expectant are themselves controversial. Patients with severe shock from multiple traumas, multiple bleeding sources, complex liver injuries, or similar injuries are problematic in considerations of which patients are truly immediate vs. expectant. Time, as stated before, becomes a factor, converting immediate patients into expectant patients when resuscitation is predicted to take too long or to take too many resources away from other patients. By the same token, predictions of expected time requirements can convert delayed patients into immediate ones as ongoing physiologic responses to bleeding and/or infection develop. Location also changes patients' classifications and must always be considered. The standard of care in Iraq and at the 31st CSH in Baghdad is not the same as in the United States. Iraqi patients who are going to be chronically ventilator dependent or are severely brain damaged may be expectant even if they survive their acute injuries, because they will certainly die as a result of complications from a lack of chronic care available in Iraq. Various triage situations are illustrated in Figure 1.

The responsibility of the person doing triage is to keep all of these concerns (and others) in mind while evaluating and incorporating a barrage of incoming patients. Triage is, needless to say, a difficult task. Triage requires significant levels of practice, skill, and medical maturity. No one person can realistically keep

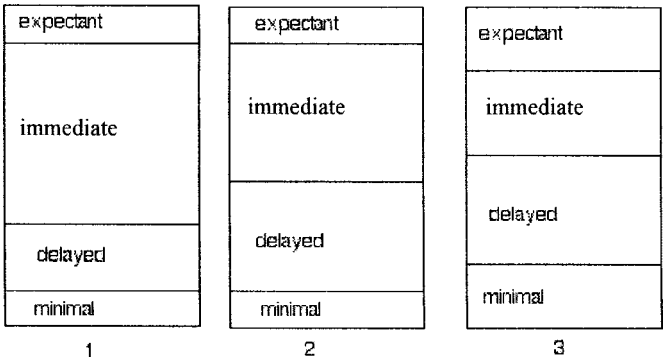

Fig. 1. Triage categorization of patients under different circumstances. 1, CSH in noncombat mode, similar to a civilian trauma service. Expectant diagnoses are uncommon, and few wounds are called minimal. 2, CSH early in combat experience, trying to do too much for too many. 3, CSH later on, with better understanding of which patients are expectant and which patients can wait until they are evacuated to the rear. The delayed patients may be evacuated before surgery. This may result in increased morbidity rates for all but may be necessary to reduce the mortality rates for more-immediate wounds. More wounds are considered to be minimal.

all of the compounding variables in mind with every decision, and this opens the door for questioning the practice of triage. How can one person be objective and fair? How does one person maintain the medical trust of patients while potentially limiting their care? How can choosing one patient to try and save at the expense of choosing another patient to let die be ethical at all?

The ethical principles most pertinent to a discussion of triage are fidelity, veracity, autonomy, justice, and beneficence.[10,11] Fidelity is the establishment of trust between a physician and his or her patient.[10] This trust forms the basis for the role of the physician and the role of the patient in a time of need. A patient is expected to defer to the physician, who, by unspoken arrangement, becomes obligated to care for the patient. The competing interests of resource allocation and triage of other patients' care before an individual's care appear to conflict with this fiduciary responsibility of the physician to an individual patient.[10] Fidelity, however, is not broken by triage. The loyalty between physician and patient can arguably even be strengthened as long as the individual patient can see his or her position in the grander scheme of medical necessity. Fidelity is reinforced, not broken, when the individual patient begins to understand that the physician has only delayed his or her health care for the higher purpose of caring for both sicker individual patients and the whole group. The patient and the physician are no longer at odds but rather are both altruistically working for the benefit of the other patients and the group.

The trust placed in a physician by any individual patient during triage may actually be greater than the trust normally placed in a physician by a patient under more routine circumstances. Paradoxically, patients often place more trust in physicians when they are more vulnerable, in hopes that this will provide additional beneficial power to the physician and help them more in return.[6] This increased responsibility also grants permission for the physician to transcend focusing on any one individual physician-patient relationship and to be able to take on multiple fiduciary relationships at once. It is because patients typically defer this critical level of health care decision-making only to physicians that the responsibility of triage is one for physicians alone.[3]

Veracity represents patients' expectations that their physician will tell them the truth.[10] Without veracity, there is no true fidelity. Military triage principles are also based on veracity. In fact, the civilian counterparts to rationing of care, such as HMOs, have more ethical difficulty with veracity than that in any military setting. For example, some HMOs impose "gag clauses" on physicians regarding the HMO guidelines and the incentives the HMOs use to steer physicians' interactions with their patients.[1] Medical choices are often limited before any evaluation of the patient has begun, in an effort to conserve money or resources. In contrast, in the military, the fact that resources are limited and that the mission (as a stretched comparison with the HMO's "mission") takes precedence over individual welfare is not hidden and is plainly known. Triage is a cold hard fact that all military medical personnel must use to forward the larger goal of the overall mission. Military physicians acting under the guidance of this preexisting transparent framework are thus transparent in purpose themselves, and their veracity is unquestioned. Veracity does not mean that all dying patients need to be told they are going to die or that soldiers who ask, "Is my buddy going to die?" be crushed by the whole truth. Although the principle remains steadfast for each interaction between an individual patient and a physician, the guarantee of veracity, the whole truth, becomes apparent only when it comes to judging the triage physician's interaction with the whole group.

Patient autonomy involves a number of different concepts, including privacy, voluntariness, self-mastery, free choice, choosing one's own moral position, and accepting responsibility for one's choices.[10] These concepts define a "respect for autonomy" that is summarized as "personal rule of self by adequate understanding while remaining free from controlling influences by others and from personal limitations that prevent choice."[1] Respect for a person's autonomy covers their thoughts, will, and actions.

Triage situations mandate that individual autonomy be placed secondary to the collective good. How, therefore, can autonomy be preserved at all? Some individuals immediately recognize the necessity of triage and voluntarily choose to cooperate, or even assist, with the care of other patients deemed more urgent. Again and again, soldiers in the emergency department of the CSH demonstrate their desire to have their fellow soldiers treated first, regardless of their own injuries. These individuals, although they are far from considering it at the time, are actually enforcing their own autonomy by choosing not to be treated in preference to others. The more that a physician or society can educate individuals about the needs of the many vs. the needs of the one in these triage situations, the more people will put themselves into this category during an extraordinary situation and the more individual autonomy can be respected.

Unfortunately, respect for individual autonomy cannot always be respected, such as when a single patient refuses to yield his or her needs to another or to the group. Sometimes the concern for a patient's autonomy is purposely not followed, even if it can be respected. Children and severely ill patients lack self-mastery and moral reasoning and may not be in a position to decide what is best for them medically; therefore, their autonomy is curtailed. Similarly, during triage, individuals may not always know what is best for them. They may have been in

the same vehicle that was struck by an improvised explosive device but not know that their fellow soldier is dying when they are complaining that they are not being treated rapidly enough. The respect for autonomy is relative to the situation.

Patients who refuse to sacrifice their demand for respect for autonomy may be more concerned about the justice of triage. Justice is fairness.[2,10] In the setting of constraints regarding delivery of medical care, sometimes affecting even life and death, the only way for individuals to place their trust in the physician and let go of dominating concerns for autonomy is when triage is explicitly equitable. Equitable triage does not mean equal treatment for all patients, however, because the purpose of triage is to define priority of care and match that with allocation of resources. Triage requires that a single person make rapid decisions of tremendous impact. These decisions cannot be made by committee to ensure fairness, because of the speed at which they are made. Triage done by a single person, unfortunately, is clearly open to criticism of bias and inequality.

To ensure that justice is being applied in these situations, oversight of the person performing triage must be instituted. Clinical guidelines are one approach to enforcing good ethical practice by a triaging physician. The Geneva Convention, for example, dictates that injured patients be triaged according to medical necessity, to the exclusion of nationality or even status as an ally or enemy. This can be quite difficult to explain to an American soldier watching as the insurgent who just killed one of his comrades is treated. Only by understanding the grander intent of the Geneva Convention can the soldier see why this is so important. Without clear, concise, explicit guidelines, triage is often perceived as inadequate and poorly organized by patients and the public.[4] Guidelines for triage, however, do not supersede the judgment of the physician in triage situations. The ultimate decision-making authority and subsequent responsibility always fall on an individual, who cannot be controlled from without but must be taught to follow ethical principles from within. It is impossible to guarantee justice through an external influence in any triage situation, but it can be ensured after the fact through appropriate review.

Beneficence, or the requirement of benefit for the patient, is the second most important job of a physician, with the first being "do no harm."[2] Similar to the ethical principles described above, beneficence is a prime concern during triage, but it is also relative to the situation. When involved in the rationing of care, a physician may need to violate the beneficence for one patient to ensure it for another or for others. This is a role with which society (or military command) has charged the physician. It is neither a voluntary position nor a desirable one, but it is necessary. The concern for beneficence of members of a society typically outweighs the concerns for any individual. In the acute setting of combat medical care, the physician's duty is changed to "do the most good for the most people." The exact way in which this is accomplished is not outlined because it is different for every situation. Again, it is impossible to set rules and guidelines that can ensure beneficence to individuals in a triage situation. Only upon review of the true outcomes of the individual patients, and comparison with their predicted outcomes and triaged status, does the beneficence for each patient and the group as a whole become apparent.

As explained above, prospective evaluation of triage is not possible. Retrospective review is possible but problematic, although it is the only realistic way that ethical principles can be evaluated in these situations. The physician in charge of triage should be questioned and "debriefed" after every triage situation by peers in the same situation. This debriefing should outline thought processes, concerns for resources, examples of specifically remembered patients, and concerns for mistakes. Errors may not be true errors in judgment or apparently unethical decisions but may be genuine misperceptions of available resources or tactical needs. Only individuals in the same situation are able to recognize the same concerns and fairly evaluate the appropriateness and justice of the triage decisions. External review may not recognize the same factors or place them in the same order of importance as the triage officer, and conclusions regarding the equality of triaged care in a given situation cannot be made. Questioning the justice of any triage situation cannot be fairly done by individuals who are too involved in the action themselves either. Consider the disparity in opinions between the physician who triages one patient as expectant and another who, concerned about the individual patient only, cannot understand why. Who really has the ethical high ground in this situation?

Conclusions

Triage, like medicine itself, is at times more art than science. The role of a physician doing triage is conceptually very clear but is practically and ethically very complicated. Individuals assigned to perform triage must separate themselves from individual concerns regarding any single patient's condition, as well as a multitude of other influential factors. It is only in removing oneself from the individual components involved in triage that the overall goals and processes become apparent. It is also only in this "omnipotent" state that the ethical principles of fidelity, veracity, justice, autonomy, and beneficence are ensured. These ethical principles are not regulations but aspirations.[2] Although these abstracted principles are themselves unchanging, their applications are relative to the situation at hand, especially in circumstances such as triage of medical care. Oversight and review are extremely important, but true ethical and practical concerns can be reviewed only from within the same situation.

The importance of proactively addressing the ethical concerns of triage is clear. Every day, we are facing greater shortages of medical capability in the face of increasing demand, and rationing of care is thrust upon us all. In addition, the acute masses of casualties that used to be expected only in battle are coming back to the civilian community in the form of terrorist attacks. Collectively, we must all better understand the role, the "rules," and the ethics of triage.

Acknowledgment

We acknowledge Craig M. Klugman, University of Nevada, Reno, for his help in preparing this article.

References

1. Hall MA, Berenson RA: Ethical practice in managed care: a dose of realism. Ann Intern Med 1998; 128: 395–402.
2. Hartman RG: Tripartite triage concerns: issues for law and ethics. Crit Care Med 2003; 31(Suppl): S358–61.

3. LePetit Larousse, pp 1064–6. Paris, France, Librarie Larousse, 1959.
4. Sprung CL, Danis M, Armstrong C, et al: Consensus statement on the triage of critically ill patients. JAMA 1994; 271: 1200–3.
5. Advanced Trauma Life Support, Ed 6, pp 20–1. Chicago, IL, American College of Surgeons, 1997.
6. Moskop JC: A moral analysis of military medicine. Milit Med 1998; 163: 76–9.
7. Swan KG, Swan KG Jr: Triage: the past revisited. Milit Med 1996; 161: 448–52.
8. Baker SP, O'Neill B, Haddon W Jr, Long WB: The injury severity score: a method for describing patients with multiple injuries and evaluating emergency care. J Trauma 1974; 14: 187–96.
9. Champion HR, Sacco WJ, Copes WS, Gann DS, Gennarelli TA, Flanagan ME: A revision of the Trauma Score. J Trauma 1989; 29: 623–9.
10. Gelling LB: Ethical principles in healthcare research. Nurs Stand 1999; 13: 39–42.
11. Jonsen AR, Siegler M, Winslade WJ: Clinical Ethics. New York, NY, McGraw-Hill, 1998.

Operation Iraqi Freedom