ETHICAL ASPECTS OF TRIAGE

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"…que le respect de la vie soit le principe élémentaire de l'éthique et de la vraie humanité."
(Respect for life must be the basic ethical principle and the truth of humanity.)

Tableau in front of the Professor Schweitzer Hospital, Lambarene, Gaboon

Historical roots and principles of Medical Ethics (3)

The discipline of medical ethics is concerned with morality, moral obligations and the principles of proper professional conduct concerning the rights and duties of a physician himself, his patients and fellow practitioners, as well as his actions in the care of patients and in relation with their families. Its foundations lie in the philosophical traditions of Eastern and Western thought and have strongly shaped modern codes of conduct and conventions.

Among the early sources of ethical thought that have been transmitted are Pharaonic papyri and inscriptions. Egyptian ethics were "practical ethics", based on general observations and expressed in practical admonitions (11). There were of general content, giving a framework for everyday life. One of the first statements of a moral of conduct explicitly for physicians is found in a text from Ioanian Greece: the Hippocratic Oath (Hippocrates of Cos, ca. 460–370BC). It states: "[t]o the law of medicine" the life [a physician] shall lead "shall be for the benefit of [my] patients according to [my] ability and judgment, and not for their hurt or for any wrong."(10).

According to the anthropologist Margaret Mead the Hippocratic Oath posed a landmark in the psychological development of society: "For the first time in our tradition there was a complete separation between killing and curing. Throughout the primitive world, the doctor and the sorcerer tended to be the same person. […] With the Greeks the distinction was made clear." It was supposed to be a lasting one.

In Roman times the principle expressed in this phrase of the Hippocratic Oath has been formulated as primum nihil nocere (first do no harm) and thus formulates the maxim of non-maleficence. Together with restitutio ad integrum (recovery to integrity) and bonum facere (practice your art well) this maxim until today forms the general principle of medicine.

Chinese tradition strongly refers back to the writings of the Confucian physician Sun Simiao (ca. 581–682). In his work "On the Absolute Sincerity of a Great Physician" we find the following elaboration on the principle of equal treatment: "…a great physician should not pay attention to status, wealth, or age; neither should he question whether the particular person is attractive or unattractive, whether he is an enemy or a friend, whether he is Chinese or a foreigner, or finally, whether he is uneducated or educated. He should meet everyone on equal ground; he should always act as if he were thinking of himself." (15).

Immanuel Kant (1724–1804), major representative of the European Enlightenment and founder of critical philosophy, lay down his "categorical imperative" (1785) as the standard of rationality from which all moral requirements are derived. "Act only according to that maxim whereby you can at the same time will that it should become a universal law." Rather than expressing an own morality, the statement expresses the condition of the rationality of conduct. Another Kantian formula again illustrates this fact: "So act as to treat humanity, whether in your own person or in another, always as an end, and never as only a means." (6). For Kant, moral questions are determined independent of reference to the particular subject posing them and thus universally valid. This moral universalism is regarded as the distinctive aspect of Kant's moral philosophy and has had great impact on later concepts of human rights and equality.

The first attempt for the establishment of a more codified way of conduct was initiated in 1864 by

Henry Dunant (1828–1910). After the shock of seeing the battlefield of Solferino (1859) and the agony of a great number of wounded soldiers lying unattended, he suggested that the governments of Europe and several American states come to a conference for the purpose of adopting a "Convention for the Amelioration of the Condition of the Wounded in Armies in the Field". The main principles laid down in the so-called First Geneva Convention were:
1. Relief to the wounded without any distinction as to nationality and 2. Neutrality (inviolability) of medical personnel and medical establishments and units (13). These same goals have been sustained in all of the later Geneva Conventions, and may be considered as the basis for further ethical thinking and behavior in medicine.

It was only after the traumatic experiences of World War II that the international rules and laws on the protection of human rights came into force. As a consequence of the atrocities of war, one of the outcomes of the Nuremberg Trial was the so-called "Nuremberg Code" (1947), a ten-point guideline for medical experimentation involving human subjects. In its first principle, the Nuremberg Code states: "The voluntary consent of the human subject is absolutely essential." The person involved in medical experimentation should have legal capacity to give consent and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable the subject to make an informed decision (9). Thus, the principle of "informed consent" became a requirement for medical experiments involving human beings, and is today assumed as a general principle in any case of medical treatment. The fundamental influence of the Nuremberg Code is evident in the subsequent shaping of national and international codes and regulations, e.g. the Universal Declaration of Human Rights (1948) which is supposed to safeguard the fundamental rights of the individual. Articles 1 to 3 hence recognize the freedom, equality of all human beings, respect towards each person and the right of the individual to life, liberty and security of person (14).

In 1964, the World Medical Association (WMA) developed the Declaration of Helsinki as a set of ethical principles experimentation on human beings. Its cornerstones include the general respect for the individual, the right to self-determination and the right to make informed decisions and a strict responsibility resting on the medically qualified personnel independent from that consent. The declaration also strongly emphasizes (a) that the concern for the interests of the subject must always prevail over the interests of science and society and (b) that ethical considerations must always take precedence over laws and regulations (17). Although various other documents have been developed in the meantime, the Declaration of Helsinki is, with several amendments, until today one of the most authoritative ethical guidelines in medicine.

Triage and its ethical dimension

All of the above mentioned ethical principles refer to the individual treatment of patients under regular circumstances. However, in disasters (8), where there is an acute and unforeseen imbalance between the capacity and resources of the medical profession and the needs of survivors, the regular processes of treatment can no longer apply for they cannot be fulfilled. The sheer number of injured or ill may overwhelm the capacities of medical responders who therefore must establish priorities as to who should be treated and in which order they should be treated and/or transported. It is not possible with a limited number of qualified responders with inadequate equipment and transport capabilities to attend to the needs of all simultaneously. Each casualty encountered must be assigned a priority for field treatment and evacuation or transfer. Thus, the injured and/or ill each are sorted into groups according to pre-established priorities. This process is called triage.

Triage is defined as the selection and categorization of the victims of a disaster aiming at appropriate treatment according to the degree of severity of illness or injury, and the availability of medical and transport facilities. The performance of triage must be avoided whenever possible and when it needs to be applied it raises important ethical issues, as acting according to priorities means that individual interest must respect the interests of the mass of victims. Hence, the above mentioned principle of the Declaration of Helsinki concerning the interest of the subject which is supposed to prevail over the interest of the society, can under these circumstances not be followed. Individual medical care needs to be given up in order to conduct a disaster medical approach. In disasters the physician, while remaining responsible for the wellbeing of each of

the victims, must on the other hand decide who should get help urgently with regard to the outcome, i.e. survival. In 1994, the World Physician Association released a statement on ethics and disaster medicine that declares that under disaster condition it is agreed to abandon one's commitment of treatment of a single person in favor of stabilizing vital functions of many patients. It continues to point out that it is unethical for a physician to persist, at all costs, at maintaining the life of a patient beyond hope, thereby wasting to no avail scarce resources needed elsewhere. Therefore, Disaster Medicine should keep in mind that the technical and medical resources sometimes are limited, as is often the case in situations involving mass casualties. Under such circumstances the immediate availability of optimal medical supplies according to the standards valid in individual medicine cannot be guaranteed for every patient. The unusual situation compels the physicians to provide the best supply of the available forces and resources for as many patients as possible. In order to achieve this, a category of urgency must be implemented and should be divided into a sequence of priorities.

Herein, the physician's decision should always follow the above developed ethical guide-lines for conduct in as far as possible, for example the principle of informed consent should be stuck to in as far as ever possible. Even and especially in disasters, the physician needs to demonstrate the highest degree of personal moral integrity and responsibility. Additionally, he or she needs internal stability and external authority in order to take the necessary decisions. The classification process according to the seriousness of injuries should therefore be carried out by the most senior and experienced physician at the disaster site or receiving hospital. All physicians, paramedics, and nurses at the site should be subordinated to this command physician. As triage must not delay the starting of life-saving procedures, the commitment of further "triage-physicians" may be required (4).

Categories of triage

Currently no Europe-wide or international agreement on triage categories and ethics exists. In order to harmonize and facilitate border crossing and international disaster cooperation in the field, we propose the following system of triage with its classification into four clearly defined groups:

T-I
Triage Category I victims must have the following characteristics:
1. Unstable vital functions.
2. Require immediate life support before urgent hospital admission.
3. Must be able to treat them within 1 hour of discovery.

T-II
Triage Category II victims must have the following characteristics:
1. Severe injuries but with stable vital functions.
2. Transport priority after first aid.
3. Must be able to be treated within 4-6 hours of discovery.

T-III
Triage Category III victims must have the following characteristics:
1. Minor injuries.
2. No transport priority.
3. No hospital admission required.
4. Treatment can be provided by general practitioner.

T-IV
Triage Category IV victims must have the following characteristics:
1. Unstable vital functions.
2. No prognosis for survival under given circumstances.
3. Delayed treatment.
4. Re-evaluation as a process of continuous triage is indispensable.
5. Provision of psychological and supportive care.

It is very important to stress that in the case of an accident, where the individual medical rules and standards almost always may be sustained, no patients should be categorized into the T-IV group. Under disaster conditions it is crucial to not waste time with the reanimation of most probably lost patients because the same time can be used to provide treatment for cases with better prospects. The victims classified as T-IV need all the psychological assistance and care that can be given by the personnel, relatives, and other helping persons. At the same time, the suffering of the victim should be mitigated by the application of analgesic drugs and sedatives.

Constant re-evaluation of this group as a process of continuous triage is indispensable, as a change in the victim's status or in the numbers of available personnel, quantity of supplies, and/or transport capacity may occur at any moment: a victim who had been categorized into group T-IV could be re-classified into group T-I, i.e. immediate life support. A case from the Cambodian War in 1980 illustrates this: A ten year old girl with a cerebral gunshot injury first had been classified into group T-IV, but further evaluation of the child's state indicated an amelioration of the severity. After immediate operational treatment the girl survived.

Special consideration of certain groups

This example leads to another important question regarding prioritization in triage: The question of how to deal with children, mothers and pregnant women. Since one would expect children to have the highest number of life-years ahead of them, saving a child by prioritization would imply saving the highest number of life-years. A similar assumption has to be brought forward for pregnant women, who are the carriers of two lives. Another Cambodian case shall be mentioned here: A young pregnant woman had suffered a gunshot wound entering her left chest and penetrating into the abdomen. It was not clear in how far the unborn child was affected by the shot. In such a situation, where the woman would have been categorized into group T-IV, her pregnancy and the possibility of saving the child led to immediate operational treatment. In this case, however, the bullet had also killed the unborn and both, mother and child, were lost. Mothers would be a third, if less acute, group which qualifies itself for special consideration. They often fulfill an indispensable function for their younger children, thus their death might lead to a chain reaction that leads to mediate misery and possible death of her children, depending on the acuteness of the general situation.

Guiding principles and special points of concern

As has become clear by now, the necessity for triage raises special points of concern which are not covered to full extent by the ethical standards used in individual medicine. However, they are still valid as points of reference. The first three articles of the 1948 Declaration of Human Rights – covering freedom, equality, respect and the right to life, liberty and security of the person – form the ethical framework from which triage principles may be drawn. If these three Articles are combined with the condition of informed consent, then physicians have an obligation to provide medical services by their own choice, without the intervention of any element of force, fraud, or constraint. But this also means that the duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates or directs the treatment. Thus, proper education and information regarding ethical issues in mass casualty situations is important for the providers of pre-hospital and hospital care as well as for medical authorities. Additionally physicians need to be prepared to face disaster situations in which triage is unavoidable. Specialized training programs need to be established to equip them with the necessary knowledge and experience to categorize casualties in every potential mass casualty situation in a way that respects the fundamental ethical principles of emergency care in disaster situations (1). This also helps them to cope with possible feelings of guilt. Since patients are understandably selfish and shortsighted regarding their own care, not only they themselves but possible also their caregivers can feel that triage is immoral. Thus, both providers and patients must learn the considerations and consequences of triage. Training and preparation for the first can help the latter to better understand the guidelines and principles of their treatment (12).

Classification of casualties using a military perspective – "treat combatants with minor injuries first" – may sometimes be necessary under extreme war conditions. However, extreme war conditions may also create extreme human rights violations for victims if the classifications for triage are not founded upon humanitarian law. The author bore witness to this during the Lebanon War in 1982. While physicians were performing a surgical operation, the injured combatant was executed by his commander while lying on the operating table. This is not military triage; this is – without a doubt – a violent crime. Thus, it needs to be asserted that classifications using other than medical principles are a clear violation of human rights and the humanitarian law.

In ascertaining the condition of informed consent, the experienced physician is obliged to abide by the rules noted above. This will be most difficult when the victim has lost consciousness or is suffering from polytrauma, shock reactions, or psycho-

logical disturbances. However, if immediate family members or other relatives are on-site, they must be informed about the medical procedures that are to be undertaken. The decisions they take can raise further difficulties for the treating physician since they will be culturally bound and based on alien concepts of "good", "evil" and possibly "taboo". "Non-maleficence" (primum nihil nocere) might be interpreted in a way that differs from the interpretation and understanding of the treating physician. It needs to be taken seriously and respected even if this might be difficult to accept.

Inherent and comprehensive respect for foreign cultures and traditions is a constituting part of the Ethical Code of Conduct of the International Committee of the Red Cross (ICRC) and a great number of NGOs, whose guidelines complete the professional standards from the ethical point of view. In reference to the basic ethical principles that have been developed since 1864 and after World War II, the Code states that:

1. The humanitarian imperative comes first.
2. Aid is given regardless of the race, creed, of nationality of the recipients and without adverse distinction of any kind.
3. Aid will not be used to further a particular political or religious point of view.
4. We shall endeavor not to act as instruments of government foreign policy.
5. We shall respect culture and custom.
6. We shall attempt to build disaster response on local capacities.
7. Ways shall be found to involve program beneficiaries in the management of relief aid.
8. Relief aid must strive to reduce future vulnerabilities to disasters as well as meeting basic needs.
9. We hold ourselves accountable to both those we seek to assist and those from whom we accept resources.
10. In our information, publicity and advertising activities, we shall recognize disaster victims as dignified human beings, not as hopeless objects.

Point 5 declares what has been mentioned above regarding respect for foreign cultures. The following point, however, brings in another crucial point: As disaster situations are mostly characterized by shortages of resources and supplies, the medical personnel often has to improvise. In such cases it is even more important than in other, less acute or urgent situations, to make the best out of what is available locally, e.g. using a coconut as a drip replacement.

Need for a universal resolution

Until today, there is no international standard for a system of classification into triage groups. The above mentioned system of classification into four groups is in Germany the proposed and agreed system, for it provides a differentiated view on casualties, ranging from minor to very serious injuries. By the introduction of category T-IV a tool exists which – only in necessary cases – allows for a deferral of cases that cannot be given priority for lack of assumed success and restrained resources. However, the strict adherence to the ethical code will guide the regular re-evaluation and guarantees intervention, if possible at any stage. If this system will be used or another, it is of great importance to establish an international standard system of classification in order to facilitate international disaster cooperation in the field.

But not only in regards to the classification system an international standard is needed. Currently there is still no Europe-wide or international agreement on ethics and triage. A resolution that could achieve consensus could be similar to the statement that was developed by the Ethic Scientific Board of the German Medical Association (1980):

"The supreme law of medical practice is to obtain life, to conserve and to recover health, and to alleviate suffering. The doctor has to respect the patient's dignity and has to be reliable. Also, in disaster, those obligations should not deprive the doctor of his responsibility, e.g. in a situation with a great number of people with health injuries due to natural, technical, or biological events. This is also valid in case of war." (2).

In order to identify an appropriate ethical line of conduct, the principles elaborated in this article should be taken into serious consideration.

Conscience as a last resort

However, it needs to be pointed out that classification can only be an instrument, lightening a burden that cannot completely be taken from the physician: To finally make the moral decision on

treatment or deferral, thus deciding to possibly lose a life in favor of another whose chances for survival are considered higher.

A clear classification and training in triage will create a system in which the ultimate instance (16) in decision making – the individual conscience – will not have to serve as the chief point of reference.

Only in extreme cases, in which the standard typification does not apply and where a huge moral dilemma appears, will the physician have to rely on his or her personal conscience. These cases do occur, though, and thus conscience has to be considered the complementary instance in triage.

It is a specific characteristic of conscience that although it is grounded and existing in each single person, it also needs to be "cultivated" in order to fully develop its potential to serve as a reliable measure for decision making in situations of moral dilemma (5). This "cultivation" is naturally culture- and experience-bound, and it is to be assumed that the more experience a person has concerning a certain situation (e.g. mass casualty incidents), the more reflected will his or her decision be, a point which emphasizes the principle of seniority in action mentioned before.

Conscience is not a norm. A norm is shared by a number of people (usually one society or one group within society), whereas conscience is in its definition located in the individual. The individual and its conscience are shaped by the social norm, but it still has the power to decide against the norm. It is the core freedom of conscience to – on moral grounds – disagree with social norms and take another direction. Sometimes this even serves as a harbinger of a new norm.

Both aspects clearly point out that decisions based on personal conscience are highly dependent upon the one individual taking the decision. Responsibility is involved, as is power. Neither the patient, nor the physician hope to solely rely on such decisions with the psychological insecurity they pose for the patient, and the huge burden that repeated conscience-based decision making poses for the physician.

The system of classification for triage that has been discussed in this article reduces both insecurities to the lowest level by providing a clear framework within which the decision making processes occur. Being rooted in medical ethics developed over centuries, they serve as a foundation on top of which the individual ethics pose the final instance. Only together, as complementary forces, are they complete, and can triage be conducted in a morally sound way.

Conclusion

Although triage primarily serves as a strategic tool in case of a disproportion between needs and resources, it implicitly leads to the ultimate question of the worth of human life and thus touches upon the core ethical dimension of disaster medicine (7).

In order to pay due to this question and take responsible, live-saving decisions under disaster conditions, it is essential to give physicians a tool that lightens the burden of decision making. An ethically sound international standard of classification in triage will serve as the major framework, leaving only few cases to decisions solely based on individual conscience. It is thus of utmost importance that politics finally formulate and implement such a system of classification.

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