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Emergency Management in Public Health Ethics

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- competent' Q14e No; 'a man is not proud of his colour is not fit to live.'
- A458 'I would want to know more on genetic engineering, you can e-mail me at ideleevbu@yahoo.com'
- A446 Q14e No; 'black or white what matters is what is on the inside' Q15a less likely; 'he has a right to choose what he wants to be to control himself or subdue urges which are rather absurd' ... 'yes, I would structure my child in accordance with my desire but the truth is my religion forbids it. As much as I desire it my religion will restrict my decision'
- A444 Q9 Yes; 'I choose a boy because I am a man, and he will be there to inherit my name when I am dead'
- A442 Q9 Yes; 'because of the belief that a male child is more capable to withstand difficulties in life' Q15b Yes; 'because lesbianism in Africa is a social aberration, and cultural taboo therefore it is improper'
- M 307 To decrease the chance of a disability would be a marvellous thing if the child would suffer, but to make your child definitely heterosexual would eradicate free speech and choice and that is morally wrong in my opinion'
- M316 Q15a No; I am homosexual so I would be more comfortable with a gay child'
- A453 Q15a No; 'I don't believe homosexuality is genetically transmitted. There are other ways of correcting such a vice'
- A449 Q15a Yes; 'my religion and my common sense do not agree with homosexuality and I hate them so I will stop it immediately if possible because they are abnormal'
- A445 Q15a&b More likely; 'because I do not want my child to be gay'
- M300 Q15a, No; They are who they are, sexuality does not make someone a better or worse person'
- M281Q15 yes; Amazing! The world would be a better place
- M267 'If I have contradicted myself it is because this topic, as you realise, is terribly complicated but overall I feel engineering of personal physical traits is wrong'
- M251Q22 No; how much do they spend on warfare?
- M340q22 No; 'people all over the world live in poverty and these kind of funds are needed by the poor of the poorest in our world today'
- M326q14a No; surely, IQ is more environment than hereditary/genetics. There is no quick fix to a better life'
- M326q11b No; 'Who decides what is classified as a degenerative gene? Ginger hair? Homosexuality? These are choices we should not be allowed to make for future generations' As a Quaker, I believe that we should leave some aspects of our life to providence. I don't think I have any moral rights to make the choices you outlined'
- M327q20a yes; abortion is not only to help the mother but is a way of preventing physical and emotional pain in the child'. Q15a No; 'what is wrong with being gay? I don't feel that it is a bad character trait and that it would affect my child's health or ability' Q14a no intelligence is not everything creativity and physical ability are just as important'
- A483 Q20a Yes because 'I can not be glad having a child that is likely to die after all I have suffered to bring him/her up' Q20b Yes 'having the knowledge of disabled in born baby is as good as terminating the pregnancy'
- M308 I believe medical defaults are a serious concern and could lead to a poor quality of life'
- M345q13 More likely to influence...but I would not but my culture favours 'perfect babies'
- M349 'Genetic engineering would distort the human race beyond recognition'
- M 355 'parents should love their children whatever they are like and so should not want to change them'. Q11b No; 'because God designed us to be different – if we all designed our children they would be likely to be very similar-not as God intended, in my opinion'
- M358q20a Undecided. Very hard to know how you would react to such a situation until you are actually faced with it. Would like to take moral high ground and to say no but in reality do not know how I would react'
- A475 'If adequate resources are provided for the realisation of the aim of genetic engineering, I think to a great extent human disorder and abnormalities will be greatly reduced'
- M359q19 play with nature...nature has a way selection for a reason – tampering with this may cause problems'
- M362q7b Yes; I think it will happen regardless whether it is legal or not'
- M365q20a More likely...depending on the type of problem'
- M370 'The whole thing seems far too unnatural to me'
- M373q14b More likely to do so ... 'for the simple reason that if everybody else was doing it, then your child with lower IQ is at a distinct disadvantage when it comes to competition for well paid jobs etc. and thus a higher standard of living'
- M376q20a Undecided... 'Very hard question to answer without being in the situation'
- M37814b Yes, it would be difficult for the child if they were far behind due to a lower IQ'. Q16 No... 'it is more valuable to overcome our initial thoughts and feelings, makes you a better person'
- A461 'Why should we go all the way to think about improving our genes when it is obvious that we were all created in the image and likeness of God. So we are perfect in his own way. Genes should be left the way they are even if death appears in the picture God knows all'
- M375 'Very interesting and also very worrying. I hope I am not around to see a world full of clones'
- A460 'I feel really sad about this cloning issue, I think it is an evil thing which should be prohibited'
- M341q25a Yes, I am twin
- A471 'First people should understand that genetic engineering is science i.e. man-made and is bound to malfunction or fail so in the process of that what happens when this thing fails?'

Emergency Management in Public Health Ethics: Triage, Epidemics, Biomedical Terror and Warfare

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You govern a kingdom by normal rules; you fight a war by exceptional moves; but you win the world by letting alone (Tao Teh Ching, no 57)

1. Normal and Extraordinary Situations

Life has normal and abnormal times; this is true for individuals, families, and also communities and states. There are certain technical and moral norms which guide our behavior, make us successful and reliable in everyday life and in professional life. These guides govern our behavior and the expectations of others. The rule 'love you neighbor', known as the golden rule in all cultures. We define good people in contrast to bad people as to be those who act of an attitude of

compassion, who care for others, in particular for those who are close to them: parents, family, neighborhood, but not excluding strangers. *The concept of compassion is valid for everyone, for personal and for professional activities.* Businessmen should not exploit or steal or otherwise hurt their customers. Generals have to fight the enemy, not their own government or the people of their country; homebuilders have to build stable and reliable houses. The medical profession, physicians and nurses, have their own code of ethics, more clearly defined in medical ethics: a great physician has to combine expertise and ethics, professional knowledge and human compassion. He should not make difference between his patients and treat everyone fairly and just; he should treat everyone professionally and morally as if he were his own father or mother. As famous Confucian doctor Sun Simiao in his book 'On the Absolute Sincerity of Great Physicians' wrote: *'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 friend, whether he is a Chinese or a foreigner, or finally, whether he is uneducated or educated. He should meet everyone on equal grounds. He should always act as if he were thinking of his close relatives. (Sun Simiao: On the Absolute Sincerity of Great Physicians).* In the Western world Hippocrates, who is called the father of Western medicine, expressed the same ethics by means of an oath to be sworn by physicians: *'Into whatever houses I go, I will do so only for the benefit of the sick, avoiding all willful injustice and harm'.*

In modern times, we have certain requirements for the ethics of a good physician. These requirements are based in the tradition, are taught in medical ethics classes, but above all by role model and behavior of clinicians, doctors and nurses who are exemplary teachers of their students and rightly called masters of the arts and sciences of healing, i.e. combining expertise and ethics, professionalism and compassion. The requirements for a trust-based communication and cooperation with the patient and the family include the following norms and standards: (1) the care for the individual patient who is your first obligation; only thereafter come obligations to the family, the hospital, society; (2) every intervention requires the information and the consent of the patient [or his family] out of respect for the dignity of individual values and personal choice; (3) do not treat without informed consent; (4) treat everyone fair and equal, e.g. do not make a difference between the poor and the rich, men or women, or people of so-called social worth such as public officials or dignitaries; (5) treat those who need the help most, first. It is the usual practice that emergency care is given priority over routine treatment in hospital wards; doctors are called to the emergency room and other patients and non-emergency procedures have to wait.

2. Triage In Disaster, Catastrophe and in War

The case: *A bus accident has happened on the road. All 30 people are hurt, some very severely and might die if not helped immediately; among the passengers is a nurse who could help, but she is also hurt. A local ambulance with one doctor and two nurses with some emergency equipment happen to come by. The doctor recognizes his mother to be among the more severely hurt. How would you set priorities, if you were the physician, would you treat your mother first, or those who might die if not helped immediately? Would you give the nurse a priority treatment in order to get one more trained nurse to help?*

The bus accident case presents a situation of triage. Triage occurs in natural or man-made catastrophes, in severe epidemics or endemics, after acts of terrorism and in war. There are established rules of professional conduct and ethics of triage; for medical as well as ethical reasons these rules are

different. The general rule is: save as many lives as possible in the shortest possible time or in the time available. Such a triage ethics is reverse to what is professionally and ethically mandated in normal situations. Triage ethics include: (1) give preferential care to of medical or management worth, who can assist you; (2) care for those first, who are least hurt; (3) allow those, who are hurt most, to die; (4) provide treatment, if necessary, without consent.

Of course, there will be a professional and very personal conflict for the doctor in postponing the treatment of his own mother, actually putting her into the sequence of a treatment list, which contains the easiest cases first and the most complicated cases last, i.e. violating the principle of 'filial love [xiao] for the benefit of 'neighborly and patriotic love' [zhong]. The ethical reasoning give for the triage situation is the reverse commitment of the physician and the health care system to save life: save as many lives as possible and don't save those lives, which need it most. Giving the nurse a preferential treatment contradicts the principle of fair and just health care directly, but it helps indirectly to increase the quantity of care given to everyone on the list of a sliding scale people needing less help and more help and very much help.

NATO instruction in a handbook on 'Emergency War Surgery' [www.vhn.org/Ew-surg/ch12/12Triage.html] differentiates between ordinary and extraordinary triage: *'Ordinary triage classifies the wounded so all will receive optimum care, while mass casualty triage treats the injured according to salvage value when the injured overwhelm available medical facilities and not all can be treated'.* In making triage decisions, pressure of time to treat certain cases earlier than others complicates medical and ethical decisions even further. In traditional virtue theory, this would mean that 'neighborly and patriotic love [zhong] in those extreme situations becomes a more urgent virtue than 'filial love' [xiao] and that 'colleagues' as potential partners become preferential treatment.

3. Fighting Epidemics

Case Study: Two dozen family members and friends attend the marriage of Mr. and Mrs. Wang. They come from different provinces, some even from abroad. During the festivities they got infected with a highly lethal virus, such as the SARS virus, Ebola or a pathogen similar to the H5N1 virus. Twenty die; only four survive. By using high-tech and low-tech modes of transportation, they spread this highly contagious virus around many provinces and around the globe, causing one billion people to die. The case of the Wang family spreading a highly lethal virus around the globe results from the easiness, safety, and affordability of global travel. Global travel is a high achievement made possible by a combination of high-tech developments in hardware and software and skilled businesses and good governance; it is definitely a contribution to global enterprise, communication and cooperation, not at least to better understanding each other. But global travel can spread dangerous viruses and other dangerous material more easily around the globe than before. Countries are fixed to their respective geographic place, people, viruses, materials are not. Two different scenarios describe the destructive potentials of the high-tech context for human health, human life, and human culture: (1) the 'natural' spread of global diseases, and (2) the terrorist, aggressive, or criminal use of pathogens to kill or to terrorize. For scenarios, ordinary citizens and public officials may (3) translate classical theories of 'just war' into the high-tech context of biomedical terror and warfare.

(1) Global mobility causes global spread of infectious diseases: We don't have to wait for terrorists, criminals or foreign countries to use biomedical devices for killing, terror or

warfare. High-mobility of people, made possible by integrated global travel, and global networks of trade and commerce make the spreading infectious diseases easy and dangerous. To fight these side-effects of the high-tech context of the modern globalized world, high-tech interventions are necessary. First among those high-tech defenses are (a) a high-tech research capacity, including the education and continuing education of epidemiologists and other experts, (b) a high-tech infrastructure of informing and communicating with experts and, even more important with citizens. Of particular importance is the full, clear and easy to understand information and advice to all citizens about the dangers, about self-protection, and about shelters or facilities for help. If full and easy to understand information is not given, then public authorities will lose trust and people might not follow advice and instructions. Of secondary nature, but unavoidable and probably less effective if not supported by well informed and trusting citizens is the control of travel.

To prevent the spread of the disease, ways of spreading have to be blocked rigorously; this might include the total stop of mobility for people and some merchandise. Of course, a few or many civil and human rights will have to be restricted. Following the minimax principle, such restrictions on travel and mobility need to be balanced against the lethal and contagious character of a particular disease and the extent of such a temporary restraint needs to be communicated fully and openly. Also, the establishment of an independent governance and monitoring committee would be highly advised for two purposes: to control actual restrictions and make those who are in control aware that they are monitored, and to keep and preserve the trust of the people, who suffer under those restrictions, and later report in public on their findings. Unfortunately, as these destructive side-effects of a high-tech world and highly mobile people are, they are just a side-effect, not a dilemma which would call to reduce global travel and mobility. People and viruses can travel geographically, countries cannot; therefore countries are obligated to restrict the movements of people and viruses. This includes unfortunate actions such as quarantine facilities, mandatory inoculation, restriction of movements, and other burdens on individual lives and lifestyles.

4. Public Health Ethics and Acts of Terror and War

Here is a slightly different case: Not the nice people of the Wang family, but a handful of neurotic or fundamentalist extremists, ready to commit terror and killing via their own suicide deliberately infect themselves with a highly contagious and lethal virus. They 'distribute' the deadly virus not accidentally as the Wang people did, but deliberately. They strategically infect many other people who then will infect many more on a global scale: in buses or subways leading to airports, in movie theaters or sports events, in planes and trains. Many pathogens in military or research arsenals or new strains of pathogens or deliberately modified and even more deadly strains can be used for that purpose. Biomedical terrorism and biomedical killing is a side-effect of the modern world of global integration; it is also a criminal act of highest danger which needs to be dealt with accordingly. The already mentioned instruments of high level of research, readiness to test, to inform, to advise and to react by immunization, restriction of mobility, and quarantine need to be used for the protection of innocent citizens and of humankind. But levels of uncertainty and risk are higher than in naturally occurring situations of medical triage or endemic infection catastrophes, because of the deliberate strategic destructive powers of evil-doers. There is a variety of scenarios of modern high-tech biomedical destruction, terror, and war: Evil-doers might work alone or with a few friends, might have support networks, get

help or encouragement even from governments, or governments themselves might use biomedical warfare.

(a) In cases of biomedical terrorism, only a few might be killed because of poor planning by terrorists or swift reaction by public authorities. As one purpose of terrorism is killing and the other purpose to terrorize the survivors and to breed scare and fear, it is very important that authorities and experts give the lay citizen all necessary information of how to protect herself or himself and how the pathogen lives and becomes distributed; only then will the citizen feel some sort of power over the terrorist, the attack, the terror and the angst and fear.-

(b) When and if terrorists work alone in small cells, the best defense and prevention against all forms terrorism and radical discontent in society is to support healthy cultural and ethical environments, inform and educate the people to be risk competent and vigilant and responsible citizens. Global high-tech networks of communication and travel allow good-doers as well as evil-doers to work successfully in reaching their goals. We may call the situation a dilemma; being strongly in support of technology as a tool to cultivate raw nature and uncivilized societies, I rather call it a side-effect we need to be aware of and protect ourselves against.-

(c) Terrorists most likely will have direct or indirect support from international groups, even from governments, alike the sea pirates always had. If this is the case, then those groups and governments need to share the blame and punishment and be exposed publicly.-

(d) If biomedical killing is one of the options seriously contemplated by governments, the best defense against those dangerous weapon for killing masses of innocent people are a high level of research and preparedness and, unfortunately, a policy of threatening to retaliate similarly. During the times of the Cold War this was called the strategy of 'mutual assured destruction (MAD)'. The acronym MAD, when not read as acronym, means mad, irate, imprudent, senseless, i.e. it makes the calculation to win for a potential aggressor too uncertain and also the probability of losing one's own population and power. For an intellectual and academic ethicist without real responsibility and power in those situations, it is futile and irresponsible to even evaluate the arguments pro and contra in analytical and ethical terminology; it will be the very personal responsibility of those in public office to make such decisions, which are beyond human capacities to calculate, and to live with those decisions for the rest of her life and in history.

(e) It has been mentioned that protection of certain high-tech biomedical research from patenting and public knowledge would be necessary to curb dual-use or abuse of knowledge for terrorism or other immoral use, in particular methods used to modify microbes to make them resistant to drugs [Kaiser 2005]. As secrecy this might be a means to slow the distribution of knowledge, centuries of technology development have shown that firewalls against double-use or spin-off rarely work in the long run. But certain principles of governance to prevent potential abuse of biomedical knowledge definitely is warranted, also in scientific publication and patenting. But then, potential terrorists and mass killers do not need to develop their own, potentially more deadly biomedical weapons, as the arsenals of biomedical research are full of deadly pathogens. Also, pathogens such as dangerous forms of flu or other viruses will develop naturally and evil-doers, in particular suicidal killers, will find ways to infect themselves and infect as many people as possible before they might die.

5. Does Crisis Ethics Justify Exceptional Ethical Moves?

Is the fight against biomedical terrorists and killers of any kind a war and thus allows using methods and means, which are ethically accepted in wartime? Furthermore: does the

same apply to situations of emergency caused by natural disasters or man-made catastrophes? Is the possible destruction of large numbers of people and culture so eminent, that extraordinary means are justified? European military theory and ethics, similar to Chinese military theory and ethics, has as set of principles which need to be recognized to fight a just war. There are five requirements to justify a war as a means of last resort: use of power must legitimate; it must be a just cause; it must have the right intentions; it must be the mean of last resort; it must be an obligation (*potestas legitima, causa justa, recto intention, ultima ratio, modus debitus*).

(1) The person or institution using power must be legitimate. This definitely was and is the case for elected government which has the obligation to protect its people. But in modern times, particularly in the high-tech context, professional organizations such as those of engineers, physicians, internet experts have a legitimate power to advise governments and to be partners or executors of powers in the protection of the people. People who would be high value because of their skills, would get preferential treatment, because they will be valuable assets to fight epidemics or situations of triage. Not only generals and high public officials are essential assets in fighting catastrophes, whether natural or man-made. Actually nurses or doctors are of higher immediate value than high bureaucrats who do not bring any special skill to situations of triage and great danger to a high number of people.

(2) The cause must be just, i.e. it must serve the purpose of protecting innocent people and the population for which the government is responsible, in modern times even responsible for the survival and health of the global population. In the case of biomedical destruction, but causes would justify the exercise of warlike powers. It is under discussion, whether or not preventive war is justified as the fight against microbes, once spread, is extremely difficult in biomedical and epidemiological terms, but also in terms of protecting civil and human rights. Saving people's life always has been and always must be the highest order of every compassionate and civilized person, especially of physicians and health care expert and of high public officials.

(3) The use of war or warlike powers has to come from the right intentions, i.e. the argument that one wants to protect the people must be serious; it would unethical and unjust to use that argument only to build a stronger power base for oneself. A means to check this requirement is to check whether the means used, are precisely appropriate for the purpose. Temporary restrictions of civil liberties never are allowed for the purpose of gaining more power or hurting other parties or persons in the process of politics and business, or for enriching oneself.

(4) War and warlike situations need to be the means of last resort, after all other means to protect the health and life of the people have been exhausted. In combination with other principles such as highest levels of information, civil ethics and public preparedness, citizens will understand and support the measures taken on their behalf. Restriction of civil liberties, such as quarantine and treatment or immunization against a person's will, must only be used as means of last resort. Other public health activities such as information campaigns requiring mandatory attendance are of lower impact on civil liberties.

(5) Finally, the exercise of warlike power needs to an obligation, a duty of those who resort to these interventions and acts as a last resort. For public officials the highest duty is the protection of the people, their lives and livelihood; this is a common-sense duty, but also supported by all religions, and by Confucian and socialist reasoning. It is important that everything be done to avoid situations of high emergency and

danger to high numbers of people, i.e. prevention of catastrophes by means of vigilance, safety regulations, education of experts and people, and quick responses, which might keep the proportions of disasters as small as possible.

Thus, natural and man-made disasters do, indeed, justify using the model of just war under the condition, that these five specific requirements are met. It would be advisable that ethicists and strategists in public office and in professional organizations develop more detailed lists of principles for monitoring the exceptional powers given to or taken by those who act in warlike situations in the high-tech context.

A personal word: It is extremely unpleasant and uncomfortable for an ethicist to argue in favor of restricting civil rights and liberties and in favor of abandoning people in severely pain and suffering and helping those who are less sick or hurt. My moral and intellectual background comes from childhood experiences of the 2nd World War in Europe and the student and intellectual revolution of 1968. I have seen some of the immoralities and atrocities associated with times of war and after-war. I also cherish the civil rights of free and open modern societies. I hate war and I hate everyone who takes away civil rights from people without an extremely strong and persuasive justification. However, the dangers of high-tech biomedical attacks and destruction are so threatening, that I strongly feel that the just war theory and ethics must be employed in evaluating and in guiding the situation those responsible in public office, experts in their specific fields, and above all educated and responsible citizens find themselves in the context of high-tech biomedical risks and options. Unfortunately, it cannot be excluded that sooner or later a natural disaster such as a new bird virus or any other pathogen might develop to which humankind is not immune. In the global situation of high mobility of merchandise and people, such a contagious pathogen can spread rapidly around the globe, not only within one country, and cause hundred of millions, of not billions, of fellow humans to die.

6. Prevention and Preparedness is Essential in Public Health

There are a number of medical and ethical issues which need to be discussed in detail as means of prevention and preparedness. Traditional measures in public health already have caused controversy among bioethicists and suspicion in certain populations. Polio vaccination in Nigeria has met resistance by strong forces in traditional culture and was introduced by poor government education programs. But vaccination programs as a means of prevention for diphtheria, tetanus, whooping cough, meningitis, flu, measles, mumps, rubella, hepatitis A, and influenza are either mandatory for certain risk groups or offered to highly vulnerable people. Immunization is a service to the individual as well as to the community. Education in how to prevent the spread of disease or to reduce the risk of occupational or lifestyle related accidents also are important features in the protection of health for the individual as well as the community.

Preparedness for biomedical disasters of mass proportions includes not only training of health care professionals; cooperation with other local experts and public authorities is essential. Material has to be pre-positioned, facilities other than hospitals have to be determined as shelters or for quarantine. Health care workers and other disaster relief personnel have to immunized preventively, if and when a specific bacterial or viral pathogen infection or attack cannot be excluded. Such immunization programs are costly and also might have side-effects on the health of those immunized. Ethical and professional issues associated with mandatory preventive immunization programs need to be addressed prior to immunization. Some health care workers will be quarantined

together with patients; those who for a variety of personal or family reasons rather should or would not be quarantined need to be identified long before and formal quality criteria for selection need to be developed and publicly and professionally discussed prior to implementation.

Prevention, whenever and wherever possible, is important to reduce dangers, once they cannot be avoided or averted. Prevention methods include immunization programs, education of citizens to be vigilant and alert, to follow safety recommendations and instructions. Another means to reduce the severity of a catastrophe is appropriate training and rehearsal, in particular, when many parties on the local level are involved. The chain of command needs to be established in such realistic training programs. Also material needs to be ready and pre-positioned, so that it is readily available where it is needed.

Additional to natural catastrophes, the same measures of prevention and preparedness need to be applied to the possibility of man-made disasters, those by accident and in particular those caused intentionally. Given the immoral and criminal intentions of a few determined criminals to kill innocent civilians, it also cannot be excluded that they will find neurotic or criminal expert to help them to specifically engineer deadly pathogens just for the purpose of killing fellow humans. It has been discussed to, in particular, to limit information and scientific publication on molecular research knowledge of manipulating pathogens, as such knowledge can be used by criminals to construct even more deadly viruses or bacteria. While the dissemination of knowledge rarely can be suppressed for longer periods of time, patents cannot be granted and further research will be hampered, including research on developing vaccines and antibodies for rapidly changing pathogens, as the recent H5N1 flu virus seems to be.

As disaster management is service to the people under extraordinary circumstances, public officials and health care providers need to prepare themselves during normal times for extraordinary times. Therefore rehearsals and planning and implementation exercises are extremely important. It is essential to determine the chain of command, to have more than one means of communication, to preposition materials and goods, also to include the private market sector. Bioethicists Childress, Kipnis and Moreno speak about a 'publicly accountable system' in which the public trust and the protection of the community are of highest priority; Kipnis outlines a 'decentralized system of health care delivery under catastrophic conditions, health care without hospitals' [Moreno 2004:xxi, 95ff].

Private market businesses such as supermarkets, hardware stores, hotels offer special routine service to the people; they are profit oriented and have experience to change services and goods depending on demand. The profit motivation and the skills of private business should not be underestimated in contributing to manage big and unexpected crises and disasters. In particular, when natural disasters can be foreseen, private business will preposition goods and services and might be quicker in a response to mass calamities, as has been shown in relief efforts for hurricane victims. It would be prudent for public officials in control of disaster relief to not also micro-manage the private sector, rather encourage the private sector to cooperate in relief efforts, whenever possible. The Daoist saying 'you win the world by letting alone' can be translated for government officials into the emergency situation when not everything can be done by public officials and actually should not be done by public officials and response teams. There is a certain prudence in competitive market forces, where people know their skills and are compassionate, that they as citizens and as

professionals will help where they feel help is needed and can be provided by them. Thus, the encouragement of civil ethics, i.e. the ethics of citizenship and neighborly love, is one of the most important tasks of public officials and of public discourse and culture.

7. Hard Cases in Public Health and in Great Danger

There are some 'hard cases' which had been discussed in the bioethics literature and unfortunately are occurring again and again. I mention just three: (1) Investigational torture of terrorists in order to gain information which could save hundreds, thousands or millions from attack and death; (2) killing out of compassion and mercy; (3) saving the life of an enemy in situations of limited resources.

(1) Investigational torture. *The case: A terrorist was captured who very likely has information on the whereabouts of other members of his team, his superiors and of plans of immanent attacks on a high number of people. The captors ask you to assist and consult as medical expert in proceedings of torture as a means of last resort to save very many innocent people in immediate danger. What would you do?* Possible benefits are evident and include the saving of highest numbers of innocent people, work as a disincentive for potential criminals and could lead to capture of other criminals. The World Medical Organization in 1982, and again in 2004, passed a resolution that 'medical ethics during armed conflict are identical to those in peacetime'.

(2) Mercy-killing. *The case: After a car accident, a triage situation develops and the most severely hurt cannot be treated; they scream in extreme pain and agony; some ask to be killed. They know and everyone else knows that they cannot be saved and that all of them will die a painful death. Would you active kill those who plea for that, would you also kill the others who are in similar agony but only scream?* Situations like this have been reported from the battlefields of the past when wounded soldiers were screaming between enemy lines with no hope to salvage them. In some cases, their soldier friends shot them, in other cases they listened to the screams of their comrades for hours and hours. Mercy-killing is an issue which does not occur only in warlike situations; it is an everyday issue in treating terminal patients who are in pain and suffering. Professional codes of conduct in Western as well as in Chinese medicine refuse vehemently the active killing of a fellow human as contrary to the rules of ethics and nature, and the obligations of physicians; but there are situations where compassionate health care professionals and family members have resorted to killing patients or their loved ones out of mercy and compassion.

(3) Costly health care for an enemy. *The case: United States Special Forces capture a combatant in Eastern Afghanistan, only to find out that he needs dialysis treatment. The prisoner refuses the treatment, saying he would rather be dead than in the hands of the enemy. Doctors are reluctant to treat without informed consent. Two days later, the US Secretary of Defense orders dialysis treatment, arguing that the prisoner might have valuable information on other terrorists and on planned attacks. What would you have done?* [Zupan et al 2004] The Geneva Convention on treating prisoners of war requires equal and fair treatment to all, prohibits medical experiments on prisoners if those are against the prisoner's interests, and requests informed consent.

There are more than these three cases to which an answer is not easily found and in regard to which bioethicists, health care professionals, public officials, and each and everyone of us might have different opinions. Research literature in bioethics documents and reflects these different opinions. Hard cases rarely can be solved in the classroom and should not be solved in the classroom by giving instructions, such as

you would give instruction in a cookbook or for standard treatment in medical care following quality norms. These are cases of a very personal matter where ethical and medical analysis is not enough to make decisions or to criticize decisions. The moral agent to make those decisions, beyond the capability of moral calculation, is the person in the actual situation. *Only in an actual situation, the interaction and combination of expertise and ethics can be the final test for professional and compassionate behavior based in personal responsibility.* Decisions might be right or might be wrong; one might regret to have made a certain decision at a later date. One might regret not to have involved oneself in interrogational torture because it became evident that 1000 lives could have saved, if one had not refused.

8. Disaster Ethics Is Partnership Ethics: Serve the People

Reviewing extraordinary situations of challenge to physician's and health care expert's professionalism and compassion and addressing hard cases, for which there is no clear-cut answer, points to the different roles and obligations and duties for health care professionals: Some in the field of public health, some in consulting or treating the individual patient, some in consulting on prevention, some in accompanying and comforting the frail and dement, some in consulting public officials, some in being elected to a public office based on skills and knowledge as an expert in the care for health. High-tech cultures depend essentially on skills and compassion of experts, individual citizens and communities. Physicians and other health care workers play many roles in modern society: treating patients in acute and in chronic situations, consulting and advising citizens in regard to lifestyle, nutrition, occupational and environmental health, researching and improving family and clinical medicine and epidemiology, advising government and corporations in regard to safety and reduction of risk to health, preparing, advising and cooperating in the management of natural disaster, epidemics, biomedical terror and warfare. *Dr. Research, Dr. Acute, Dr Consult, Dr Care, Dr. Manage, Dr Prepare, Dr Govern, Dr Teach, Dr Partner, Dr Special, Dr Example, they all display special skills in their craft. But all these different skills need to be developed and cultivated in the tradition of the good doctor, who according to Confucian physician Yang Chuan (300AD) defined a set of interactive professional virtues for the physician, who combine skills [ji] with compassion [ren], who are clever and wise, sincere and honest.*

Whether treating patients in the family medicine or in high-tech medicine, in disasters, epidemics, or in war, physicians need to cooperate with others, with people who organize emergency logistics, who understand radiation, pathogens or earthquakes, who can coordinate and manage. But above all, it will depend on the compassion and team spirit, all these people bring together with their skills. Real situations are different from simulated situations. But anticipatory simulation and preparedness allows for better managing extreme situations. Discussing the extreme challenges of crisis ethics, triage, epidemics, and biomedical terror and warfare in the classroom or in preparation meetings results not in a protocol that produces moral solutions, but those discussions and actions 'enhance awareness of the many moral aspects of the daily practice in which professionals operate'. What the classroom discussion in medical ethics, in public health ethics and in the ethics of emergency care cannot do, is to prescribe a list of 'to do' and 'do not'. But case studies and analytical evaluation of medical and moral options can help to develop what has been called 'moral competence': 'the ability to see what is morally relevant in a situation, knowing the points of view from which one sees it, understanding that others may see it differently, and then, with others, responding well to

what one sees' [Verkerk 2004:37]. Classroom teaching is easy; life is not easy; making ethical decisions in exceptional situations is not easy. Easy to understand is the obligation to save life, to alleviate pain and to professionally consult in matters of a healthy lifestyle and the enhancement of life; difficult is the implementation of all of this.

Extreme situations require extreme, sometimes very unpleasant and very extraordinary means of protecting individual lives, families, neighborhoods and communities. Those extraordinary means need to be guided by principle and prudence, strategically coordinated, and executed with skill and compassion. Preparedness pays off as it reduces calamities and makes the community stronger; also surviving disasters makes individuals, communities, institutions and corporations stronger.

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