Special Section: Bioethics and War

Physician Obligation in Disaster Preparedness and Response

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The terrorist attacks of 2001 were a reminder that individual and collective safety cannot be taken for granted. Since then, physicians, alongside public health professionals and other healthcare professionals as well as nonhealthcare personnel, have been developing plans to enhance the protection of public health and the provision of medical care in response to various threats, including acts of terrorism or bioterrorism. Included in those plans are strategies to attend to large numbers of victims and help prevent greater harm to even larger populations.¹

It is important to recognize that unique responsibilities beyond planning rest on the shoulders of the medical profession. Indeed, irrespective of the cause of harm—whether it arises from natural disasters or otherwise—physicians are needed to care for victims. In some instances, this will require individual physicians to place their health or their lives at risk. Many physicians demonstrated their sense of duty and courage by participating in the rescue efforts that followed the events of September 11, 2001, and more recently the aftermath of Hurricane Katrina. These and other circumstances, such as the debate regarding smallpox vaccination of front-line responders and the SARS epidemic, require the medical profession and each of its members to reflect anew on ethical responsibilities that arise in the face of adversity.

A Brief History of Ethical Obligations in the Face of Risks

Prior to the events of 2001, the most recent profession-wide debate regarding a duty to treat despite personal risks arose when there was limited understanding of HIV transmission. Those who believed there was a duty to treat appeared to rely in part on historical evidence of the role physicians had played during epidemics. However, some historians remained cautious in making any claim that such a duty existed.² In fact, they pointed to many instances when physicians had fled in times of the plague,³ and also showed that physicians who had provided care during epidemics had done so not out

Staff to the Council at the time the report was adopted were Audiey Kao, M.D., Ph.D. (Vice President, Ethics Standards Group); Karine Morin, L.L.M. (Secretary); and Sara Taub, M.Be.

The Council on Ethical and Judicial Affairs of the American Medical Association formulates ethical policies for the medical profession through its interpretations of the AMA's *Principles of Medical Ethics*. The Council at the time this report was adopted consisted of Michael S. Goldrich, M.D. (Chair); Priscilla Ray, M.D. (Vice-Chair); Regina M. Benjamin, M.D., M.B.A.; Daniel Higginson (student member); Mark A. Levine, M.D.; John M. O'Bannon, III, M.D.; Robert M. Sade, M.D.; Monique A. Spillman, M.D., Ph.D. (resident member); and Dudley M. Stewart, Jr., M.D.

of a sense of professional obligation, but either because of religious doctrines, because it was lucrative, or because it could result in fame.

By the time standards of medical ethics became codified, starting with the 1803 code developed by Thomas Percival, a growing sense of the duties owed by professionals had developed. In this vein, the AMA's 1847 code stated that: "When pestilence prevails, it is [physicians'] duty to face the danger, and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives." This clear mandate may have been moderated by the introduction of a separate notion that physicians should be free to choose whom to serve in later editions of the code. However, the AIDS epidemic led to a strong reiteration of the obligation to treat.

Much of the historical analysis regarding physicians' obligation to treat despite personal risk has focused on the treatment of infectious diseases. However, threats to personal safety, health, or life come in many different forms, for example, when a natural disaster strikes or during armed conflicts. Along the spectrum of threats, all physicians are confronted with the same question: whether the care needed by a patient or a group of patients calls for the assumption of personal risk.

Ethics of the Medical Profession

The AMA's *Principles of Medical Ethics* recognizes that many situations in medical care call for a delicate balancing. In the context of a physician's general obligations, the preamble notes that: "As a member of this profession, a physician must recognize responsibility to patients, first and foremost, as well as to society, to other health care professionals, and to self." Principle VIII emphasizes physicians' obligations to patients in the following way: "A physician shall, when caring for a patient, regard responsibility to the patient as paramount."

Arguably, the obligation to treat may be counterbalanced by Principle VI, which states: "A physician shall, in the provision of appropriate care, except in emergencies, be free to choose whom to serve . . . and the environment in which to provide medical care." However, several Opinions limit physicians' choice in light of medical need. (See, for example, Opinions 9.06, "Free Choice," 9.065, "Caring for the Poor," 8.11 "Neglect of Patient," and 10.015 "The Patient—Physician Relationship," AMA Code of Medical Ethics.)

In the context of infectious diseases, two opinions clarify the ethical obligation of physicians to provide medical care to patients infected with HIV or AIDS. Specifically, Opinion 2.23, "HIV Testing," states that: "It is unethical to deny treatment to HIV-infected individuals because they are HIV seropositive." Opinion 9.131, "HIV-Infected Patients and Physicians," also states that: "A physician may not ethically refuse to treat a patient whose condition is within the physician's current realm of competence solely because the patient is seropositive for HIV."

The *Principles* not only consider the role of the individual physician vis-à-vis an individual patient, but also recognize the role of physicians regarding the patient population. Specifically, Principle VII calls for participation in activities contributing to the improvement of the community and the betterment of public health, and Principle IX calls upon physicians to support access to medical care for all people.

Emergencies: Individual Heroism or Professional Obligation

It often appears that responsibilities to provide emergency care arise in the context of an individual patient. However, an epidemic, a large-scale disaster, or a bioterrorist attack could result in a significant portion of the population within a community requiring urgent medical care. Under such extraordinary circumstances, it is possible that a number of physicians would exhibit personal courage and provide medical care in the face of risk. However, would the personal courage of individual physicians be sufficient to assure that availability of medical care would not be compromised?

Instead of relying on individual heroism, physicians have a professional commitment to assure adequate availability of care. Indeed, professional ethics, as embodied by a code of conduct such as the AMA's, is intended to put forth a uniform standard of conduct for individuals who belong to a profession. When large-scale disaster strikes, physicians individually and collectively should use their knowledge and skills to address medical needs.

In the context of a threat to the health and safety of a population, the unavailability of healthcare professionals to provide needed medical care, due not to casualties among them but rather to individuals' refusal to assume personal risk, could be viewed as a serious failure of medical professionalism. Is this view of professional obligation morally justified?

Professional Obligations in the Face of Personal Risk

One leading philosopher in healthcare argues that relevant expert knowledge gives rise to professional acceptance of "known" risks and that it would be disingenuous to accept the privileges of professional status but not to fulfill the obligations.⁴ For example, firefighters and police officers know of the threats they face and are obligated to provide services in spite of those risks; similarly, risks that are foreseeable from a medical perspective cannot be avoided by physicians.

Such a perspective may explain in part that the risks of HIV infection needed to be understood before they could be assumed. This could lead to the conclusion that, although physicians faced unknown risks at the time of the 2001 terrorist attacks and acted beyond their professional obligations, similar conduct is now becoming part of the professional commitment. In this regard, Alexander and Wynia have shown that physicians who felt that they were well "prepared to play a role in responding to a bioterror attack [were more] willing to work under conditions of personal risk." ⁵

Another compelling justification for a professional commitment in providing medical care in the face of personal risk can be derived from four general factors that give rise to a widely acknowledged moral obligation to render aid.⁶ First is the degree of need: the greater the need, the greater the obligation to assist. This is well recognized in medicine, as expressed in Principle VI of the AMA's *Principles of Medical Ethics*, which allows physicians to choose whom to serve, except in emergencies. Next comes the notion of proximity. This can refer to spatial proximity, such that physicians closest to a disaster site have a greater obligation of offering their services than those far from it. Proximity also can be understood as a function of knowledge, such that those with knowledge of a threat have greater obligations to act than those who are ignorant of it. Closely

related is the notion of capability. A lifeguard, even if not on duty, has a greater obligation than the occasional swimmer to assist in the rescue of a drowning person. Similarly, there may be other healthcare professionals available to assist victims, but few would possess the full medical knowledge and skills held by physicians. Finally, it becomes clear that the obligation to provide assistance becomes greater as the possible sources of aid diminish. In this regard, physicians need not be victims' first providers of care, but oftentimes they will be needed when other providers cannot adequately treat victims. Altogether, these four factors justify a strong professional commitment to providing services to victims in need of medical care despite risk to the provider.

Limitations to the Duty to Treat

An obligation to treat need not be absolute. To the extent that reasonable steps can be taken to protect oneself, it is important that physicians avail themselves of such measures. In the context of infectious diseases, vaccination has played a significant role to minimize risk, along with universal precautions. However, instances where individuals fail or refuse to avail themselves, outside appropriate guidelines, of protective measures may be problematic. For example, if a large number of physicians refused certain vaccinations and if they subsequently claimed that they were unwilling to care for infected patients, a considerable burden would likely be placed upon vaccinated physicians.

Another limitation may exist to the obligation to treat, but needs to be carefully circumscribed. Physicians should not be expected to place themselves at greater risk than the benefit they can provide. Indeed, if the nature of the risk is so lethal that there is little likelihood that a physician can provide care to more than a single patient, then limiting the number of exposed physicians at the onset of an event may be necessary to ensure that a sufficient number remain available to treat patients who can reasonably be expected to survive beyond the acute event.

To address these various possibilities, sound preparedness strategies need to be established through broad physician consultation. This could lead to the preidentification of teams of volunteers willing to accept greater risk. These teams could receive specialized training to respond to specific threats instead of each and every physician being expected to possess the necessary knowledge and willingness to respond to any and every threat. Additionally, as the focal points of preparedness, volunteer teams could be offered due compensation for their training, as well as their assumption of risks. Other physicians' responsibilities would become more clearly defined—namely, to refer patients knowledgeably according to the nature of the threat.

Although such strategies would not eliminate all risk to individual physicians under all circumstances, they could help limit undue risk and assure coordinated, effective, and prompt responses. These strategies also could facilitate the education of patient populations regarding the appropriate actions to take according to various threats. In turn, this could help establish realistic societal expectations toward physicians and other healthcare professionals, alleviate unnecessary confusion or fear, and ultimately help minimize morbidity and mortality.

Another important dimension to consider as planning efforts move forward is the legal environment in which medical care is provided. Specifically, the

medical profession should advocate for the establishment of legal protections that facilitate the provision of medical care by all available and specifically trained physicians, expanding upon laws that protect physicians against liability in special circumstances.

Conclusion

Preparedness for the threat of epidemics, disasters, or terrorism requires physicians to express a renewed commitment to the ethical foundation of the practice of medicine. Indeed, when the health of large populations is threatened, society should expect that the medical profession will be prepared to provide medical care in a cohesive and comprehensive manner. To accomplish this goal, the obligation to provide care must reside not only with individual physicians, but with the profession as a whole.

Recommendations

National, regional, and local responses to epidemics, terrorist attacks, and other disasters require extensive involvement of physicians. Because of their commitment to care for the sick and injured, individual physicians have an obligation to provide urgent medical care during disasters. This ethical obligation holds even in the face of greater than usual risks to their own safety, health, or life. The physician workforce, however, is not an unlimited resource; therefore, when participating in disaster responses, physicians should balance immediate benefits to individual patients with ability to care for patients in the future.

In preparing for epidemics, terrorist attacks, and other disasters, physicians as a profession must provide medical expertise and work with others to develop public health policies that are designed to improve the effectiveness and availability of medical care during such events. These policies must be based on sound science and respect for patients. Physicians also must advocate for and, when appropriate, participate in the conduct of ethically sound biomedical research to inform these policy decisions. Moreover, individual physicians should take appropriate advance measures to ensure their ability to provide medical services at the time of disasters, including the acquisition and maintenance of relevant knowledge.

Notes

- 1. Wynia MK, Gostin L. The bioterrorist threat and access to health care. Science 2002;296:1613.
- 2. Fox DM. The history of responses to epidemic disease in the United States since the 18th century. *Mount Sinai Journal of Medicine* 1989;56:223–9; Fox DM. The politics of physicians' responsibility in epidemics: A note on history. *Hastings Center Report* 1988;18:S5–10.
- 3. Zuger A, Miles S. Physicians, AIDS, and occupational risk: Historic traditions and ethical obligations. *JAMA* 1987;258:1924–8, see reference 15.
- 4. Daniels N. Duty to treat or right to refuse? Hastings Center Report. 1991;21:36-46.
- Alexander GC, Wynia MK. Ready and willing? Physicians' sense of preparedness for bioterrorism. Health Affairs 2003;22:189–97.
- 6. This analysis is adapted from a presentation by Chalmers Clark, while he was a visiting scholar at the Institute for Ethics, which refers to the work of various commentators on the case of Kitty Genovese, who died in 1964, as more than 30 people heard her being stabbed.

Commentary: Physicians as Public Servants in the Setting of Bioterrorism

G. Caleb Alexander and John D. Lantos

Physicians have special professional obligations to respond to medical emergencies. A bioterrorism attack would be a medical emergency. Thus, it seems that physicians would have an obligation to respond to a bioterrorist attack. However, the scope of those obligations, and their limits, are vexed topics. General rules may be comforting but the details and nuances of particular situations will always be relevant.

Consider two scenarios. In the first scenario, a patient is near death after a rapid course of a highly contagious and incurable viral illness. A physician is nearby, knows of the patient's infection, and is able to determine with reasonable certainty that the patient will soon die even with medical intervention. In addition, the physician realizes that any attempt to provide palliative treatment for this rapidly dying but suffering patient would likely lead to the physician's becoming infected, which would mean a certain death for the physician as well. In the second scenario, a patient is suffering from fevers, malaise, and a painful blistering rash after infection with smallpox. The physician, although unvaccinated, knows that vaccination is available postexposure, and that her long-term likelihood of personal injury, as well as limitations on ability to serve others, is quite low. Although she can't cure the patient's disease, she can provide symptomatic

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treatment that would ease the patient's suffering.

We believe that a physician has no obligation to treat the first patient because the risks to the physician far outweigh the benefits, and the net result would likely be two deaths instead of one. We believe that a physician has a clear-cut obligation to treat the second patient.

One of the challenges with moral discussion regarding physicians' duty to treat in the setting of bioterrorism is that all scenarios are probabilistic and thus all the action is in the moral gray zone. Few would argue physicians have no duty to treat, but few would argue that there are no limits to the physician's obligations to respond. The challenge is in evaluating the basis for and extent of the duty in different settings, many of which involve numerous factors of unknown, and unknowable, risk. In cases like these, the devil is in the details, because it is the details that allow calibration of a sliding scale of duty.

Even if one grants that a duty to treat exists in a setting such as the smallpox scenario above, one can do so with an intuitive appeal that does not formally articulate the basis for such a perspective. However, moral arguments that physicians have a duty to treat have generally been made on one of three grounds-either based on patients' rights (the obligation placed upon physicians arises from the rights of patients to receive treatment), virtue (it is virtuous of physicians to perform such acts), or a social contract (physicians undertake a contract with society whereby they agree to provide care for the sick and needy, even when at some risk to their own health, and in return are compensated with income and privileged social status).

Each argument has its proponents and detractors. Although it is indeed virtu-

ous of physicians to perform acts of heroism or to put themselves in harm's way to treat the injured, this does not clearly distinguish physicians from others where such actions may be equally or even more virtuous. Rights-based arguments founder on the difficulties of transferring a general moral claim of an individual patient to a specific claim against individual physicians. Similarly, challenges to social contract theory have been made based on the difficulty of transferring an obligation of an entire profession to the obligation of individuals within the profession. Unwritten contracts are, by their very nature, unclear.

Despite limitations of a contractbased approach to the duty to treat, a review of other disciplines, and a modest conception of physicians' roles as public servants, suggests that it would be more useful from a policymaking perspective to conceptualize physicians' obligations in the face of bioterrorism using a model of public service, rather than by using a model of professionalism. Although many physicians may report a willingness to undertake risk, it seems unlikely that more than a few enter the profession acknowledging and embracing such risk. Unlike, say, firefighters or police, most doctors do not enter medicine today with any expectation that they will be expected to undergo significant personal risk as part of their job.

Public servants, by contrast, have a contract-based duty to serve. It may be a virtue, but it is also an expectation. Although firefighters may take an oath in order to define their obligations, they also sign a contract. In our view, a subset of doctors should be designated first responders to bioterrorism. Their obligations should be made explicit, their training should be different, and they should be compensated for taking on this excess risk. In short, their role would be similar to

that of other public servants such as firemen and policemen.

What would this mean? Firefighters (1) are paid by the state (i.e., not in business for themselves), (2) are paid whether there are fires or not, and (3) are deemed negligent if they do not respond appropriately, even at some personal danger. The limits of appropriateness are determined by experts in the field of fighting fires; these experts make the standards by which other members of their field are judged.

To develop such a model for physician responses to bioterrorism would take a significant societal commitment. One way to think about this would be to imagine a Medical National Guard. Governments would contract with small groups of physicians who would be paid to periodically participate in training programs designed to give them the skills and techniques necessary to manage various bioterrorism scenarios. In the event of a bioterror attack, these public servants, rather than the medical profession as a whole, would have the primary obligation, and the requisite skills, to respond.

Despite the appeal of a medical reserve corp, the existence of such a group still begs the question as to what level of risk physicians should more generally undertake as servants to the public. This level of risk must always be framed within the context of a sliding scale as highlighted by the two scenarios discussed above. It lies between that of an ordinary citizen and those of a physician specially trained and compensated for bioterrorism preparedness. Defining this level of risk, given the uncertainty involved in any bioterrorism attack, is a difficult, if not impossible, task. Nevertheless, all physicians should be considered to have a duty to treat—and one that is based on their role as public servants, rather than as virtuous professionals confronting personal risk.

Commentary: The Professional Obligation of Physicians in Times of Hazard and Need

Rosamond Rhodes

Those who read only the introductory section of "Physician Obligation in Disaster Preparedness and Response," the statement from the AMA's Council on Ethical and Judicial Affairs, apparently an elaboration on CEJA Opinion 3-I-04, E-9.067, will find an expression of laudable professional responsibility in the face of a disaster. There the AMA authors explicitly acknowledge "that unique responsibilities beyond planning rest on the shoulders of the medical profession" (emphasis added).² They also declare that, "physicians are needed to care for victims. In some instances, this will require individual physicians to place their health or their lives at risk" (emphasis added).3 As the AMA authors note, these responsibilities have been accepted at least since the writing of Thomas Percival in 1803 and endorsed by the AMA in posting their 1847 code. The commitments are also asserted in the preamble of the AMA's most current Principles of Medical Ethics, which states that "a physician must recognize responsibility to patients, first and foremost," and again in Principle VIII, which states that "[a] physician shall, when caring for a patient, regard responsibility to the patient as paramount" (emphasis added).4

Similarly, those who leap from the introduction to the "Conclusion" will find another fitting declaration of a noble profession's obligations. There the authors declare that

when the health of large populations is threatened, society should expect that the medical profession will be prepared to provide medical care in a cohesive and comprehensive manner. To accomplish this goal, the *obligation* to provide care must reside not only with individual physicians, but with the profession as a whole (emphasis added).⁵

Readers who focus on other selected lines toward the end of the recommendations will also be impressed with the profession's assessment of its members' personal obligations. The authors maintain that

[b]ecause of their commitment to care for the sick and injured, individual physicians have an *obligation* to provide urgent medical care during disasters. This ethical *obligation* holds even in the face of greater than usual risks to their own safety, health or life (emphasis added).⁶

Unfortunately, these thoughtful and fitting statements of professional duty are corrupted by the polluting influence of the AMA Principle VI, which takes back with one hand what the statement appears to have given with the other. In the end, the AMA has promulgated a politically expedient compromise in the guise of a position on the ethics of medicine. Allow me to explain why I reach this conclusion.

The Problem

Because society has allowed medicine to develop its specialized domain of knowledge and skills and has given medicine a monopoly over medical practice, and because physicians have pledged themselves through oaths, codes, and licensing to uphold wellknown standards of medical professionalism, and because patients and society rely upon physicians to uphold those standards, doctors have distinctive professional responsibilities. The core of those responsibilities, which have remained unchanged since at least the time of Hippocrates, is physicians' commitment to the well-being of patients. So, because medical needs following a mass casualty event can be anticipated, medical ethics requires the participation of physicians in planning for catastrophes and the responsiveness of physicians in the aftermath of disasters. This much should be straightforward and incontrovertible.

Nevertheless, the AMA statement shows its stripes as a political document of compromise, rather than an assertion of professional ideals and commitments, when it hedges on whether individual physicians actually have those obvious duties. Instead of explicitly outlining physician responsibilities in a disaster, the AMA emphasizes "limitations to the duty to treat." 7 Obscurely tucked into the middle of the manuscript, that section contradicts what went before and what comes after by making medical service in a disaster an option, instead of something ethically required by virtue of being a doctor. There, after some discussion of vaccination and the unusual circumstance of great physician risks in the face of little compensating patient benefits, the authors hold that the job of responding to disasters falls to "teams of volunteers willing to accept greater risk."8 The authors even seem to suggest that volunteering should be contingent upon the volunteers receiving due compensation "for their training, as well as their assumption of risks."9

This position is a far cry from a statement of responsibility. When someone has a responsibility she is obliged, bound, required to act in a particular way. When someone has no responsibility she is free to do the thing or not, to volunteer or hold back, to accept the risks or decline them. They cannot both be true at once, in the same sense, about the same matter. An AMA Opinion that contains such a glaring contradiction amounts to saying that doctors may do whatever they choose in the face of a disaster because they have no responsibility to respond.

Medicine and Risks

Medicine's historical commitments make it clear that physicians accept responsibility to patients and society, and that part of being a doctor is acceptance of the concomitant rolerelated risk. Although self-preservation limits all responsibilities, the ethically crucial questions are: (1) How does medicine determine when a danger is great enough to overwhelm the default professional responsibility of responsiveness? (2) Who makes the call? The AMA suggests that these are matters of personal judgment. That answer, unfortunately, overlooks an important characteristic of medicine.

Through the ages, one distinguishing feature of medicine is its reliance on scientific evidence (broadly construed) and "the standard of care." To explain very briefly, a gut feeling that something should or should not be done or that this is too little or too much is not enough to justify a medical decision. In medicine, hypotheses have to be supported by theory, judgments have to be supported by observation or data, and medical stands are acceptable positions when they are endorsed by a consensus of the profession. Even though Morin and her coauthors illustrate the scope of and the limitations on riskrelated exemption from obligation by discussing the AMA's Opinions (2.23 and 9.131) that require doctors to provide treatment for patients with HIV or AIDS in their section on professional responsibility, they miss two significant points. (1) Those earlier Opinions rested on a theory of how the disease is transmitted and evidence of the low risk of transmission when precautions are taken. Also (2) those opinions reflected the position of the profession rather than the private judgment of individual riskaverse practitioners. In other words, in the face of risk to physicians, responsiveness should be the default presumption because that is the standard of care. A judgment that responding is too dangerous in a particular circumstance has to be left to the consensus of medical experts with the relevant specialized knowledge and experience. In our current age of speedy electronic communication, there is no justification for allowing decisions on recusal or response to turn on the personal fear, courage, or sense of duty of the individual physician.

By crafting a code and principles and by publishing opinions on controversial issues the AMA defines the standard of care for medical practice. As the authors elsewhere agree, the AMA's Code "is intended to put forth a uniform standard of conduct for individuals who belong to a profession." ¹⁰ In the critically important matter of response to the victims of a disaster, it is crucial that the AMA accept its responsibility for defining the standard of professional behavior as responsiveness.

Principle VI

In reaching their peculiarly inconsistent position, the authors invoke Principle VI of the AMA Code of Medical Ethics, which was only added to the code in 1957.11 It states, "A physician shall, in the provision of appropriate care, except in emergencies, be free to choose whom to serve ... and the environment in which to provide medical care." Whereas the rest of the AMA Code delineates physician responsibilities, Principle VI anachronistically declares that physicians are free in choosing whom to serve and their work condition. This statement means that, except for emergencies, physicians have no responsibility to serve anyone and no responsibility to provide medical care in a place that they choose to avoid. Apparently, if I am reading the statement correctly, the implications of Principle VI for disasters is that it is up to individual doctors to decide when a situation counts as an "emergency." They have no duty to go to the scene of a disaster, they are free to leave the area of a disaster, and they do not have to provide care to those who are unable to pay their fees, particularly when the disaster has left people without access to bank accounts, ATMs, or insurance cards. Physicians are free to avoid education about how to respond to a disaster. They are free to avoid means of protecting themselves from hazards. They are free to opt out when they feel frightened.

Although it is easy to understand why AMA members have repeatedly decided to keep Principle VI in their code and why they feel comforted by the license it allows them, it is legitimate to ask whether that provision is consistent with the ethical responsibilities of being a physician. It is hard to see how Principle VI can be reconciled with the commitments espoused elsewhere in the AMA Code (or in the Hippocratic Oath or in the Oath of Maimonides or in the Geneva Code) without either eviscerating the concept of physician professional responsibility or contorting and deflating the meaning of Principle VI. For that reason, it is surprising that the authors embraced the Principle in their reasoning. In light of its untoward implications that counter the positions they espoused in both their introductory and concluding remarks, a more appropriate response would have been to debunk its inclusion in the AMA Code.

Culpability

In discussing the importance of knowledge in these decisions, the authors refer to a study by Alexander and Wynia on the relationship between physicians' disaster response preparation and their willingness to respond. They note that those who felt "prepared to play a role in responding to a bioter-

ror attack [were more] willing to work under conditions of personal risk." 12 That coincidence invites another line of speculation. Are those who recognize their responsibility for responding more likely to make themselves prepared to respond? Again, is preparing oneself to competently fulfill responsibilities a matter of personal choice or professional duty? In the early days of AIDS, some health professionals exempted themselves from the responsibility to care for patients who might be infected by saying that they lacked the necessary expertise.¹³ Quickly, the profession decided that ignorance was no excuse. Knowledge of "universal precautions" was part of what every doctor should reasonably be expected to know. There is no obvious reason to presume that the particular additional knowledge needed for a physician to respond to patient needs in time of disaster is either so vast or so esoteric that individual physicians should be exempt from responding on account of ignorance.

If there are particular things that every responsible physician should know in order to effectively respond during disasters, then continuing in ignorance is culpable. Instead of excusing physicians from an important component of their professional responsibility, the AMA should be taking steps to assure that every physician is prepared. Courses should be designed and required to update physicians in what they need to know and medical school curriculums should be adjusted to plug the gaps. After 9/11 and after Hurricane Katrina, no physician and no organization of medical professionals can legitimately turn a blind eye to this crucial aspect of medical responsibility.

Society's Responsibilities

The AMA's statement on "Physician Responsibilities in Disaster Prepared-

ness and Response" mentions some areas where society has significant responsibilities. This important topic deserves further elaboration, and the AMA should be investing significant effort in advocating for the needed changes.

Medicine has the expertise that is crucial for useful and effective preparation for disasters. For that reason, medicine must be critically involved in planning and must be given the authority for implementing required preparatory measures. Medical experts in areas such as infectious disease, public health, emergency medicine, and toxicology can envision the kinds of health problems and medical needs that can arise in the aftermath of a disaster. Planning and preparation require their input along with the collaboration of police, fire departments, transportation departments, utilities, communications, and numerous other local, regional, and national agencies and institutions.

Furthermore, in many circumstances, some portion of the response to a disaster should be decided by medical experts. For example, determination of when it is safe to breath the air or drink the water requires medical expertise. Decisions on when an area must be quarantined because of the threat of infection require medical expertise. Decisions about when a population should or should not be vaccinated should turn on medical expertise. The authority for such decisions should, therefore, be left to medicine and not politics. Other related decisions, such as when to declare a state of emergency or evacuate an area, may require medical input along with the expertise of other agencies. Social measures should be taken to ensure an improved alignment of responsibility and expertise with authority.

In disasters, medicine and medical institutions are called on to do all that

they can to address the medical needs of victims as well as the ongoing medical needs of patients. Under these remarkable conditions, some of the everyday rules that govern usual medical practice should be suspended. As part of disaster preparation, society owes healthcare providers and medical institutions legislation that makes the relaxation of rules legally explicit so that responders are not burdened by worries of legal liability as they try to meet pressing medical needs. In this regard, legislatures need to address questions such as the relaxation of rules governing credentialing, licensing, negligence, documentation, and reimbursement. In the same vein, medical institutions should not be called upon to bear an undue share of the expense for disaster response. As part of disaster preparations, legislatures should also set policies that make reimbursement for such expenses an explicit social responsibility, perhaps by extending Medicaid benefits to all disaster victims.

Principles of using what you already use frequently and investing in resources that have multiple uses are important concepts in disaster preparedness. That said, society has to accept responsibility for investments in planning, equipment, and training. Even though we hope to never have a disaster, and even though it is hard to divert resources to projects that may never be used when faced with immediately pressing needs, because they can help avert horrific outcomes, the investment in disaster preparedness must be made. We should keep in mind that the extensive advance planning and training in New York City made for an efficient and effective response to the 9/11 attacks on the World Trade Center even though the command center was destroyed in the first hours after the attack. Although the Department of Homeland Security has

recently begun to make some effort toward preparation,¹⁴ the experience of Hurricane Katrina demonstrates that far more needs to be done.

Notes

- 1. Morin K, Higginson D, Goldrich M. Physician obligation in disaster preparedness and response. *Cambridge Quarterly of Healthcare Ethics*, this issue, 417–21.
- 2. See note 1, Morin et al. 2006:417.
- 3. See note 1, Morin et al. 2006:417.
- 4. See note 1, Morin et al. 2006:418.
- 5. See note 1, Morin et al. 2006:421.
- 6. See note 1, Morin et al. 2006:421.
- 7. See note 1, Morin et al. 2006:420.
- 8. See note 1, Morin et al. 2006:420.
- 9. See note 1, Morin et al. 2006:420.
- 10. See note 1, Morin et al. 2006:419.
- 11. This was Section 5 in the 1957 version of the *Principles of Medical Ethics*. It is Principle VI in the 1980 and 2001 versions.
- Alexander GC, Wynia MK. Ready and willing? Physicians' sense of preparedness for bioterrorism. *Health Affairs* 2003;22:189–97.
- 13. It should be noted that allowing the fearful to exempt themselves from treating patients who pose a risk also leaves those physicians who feel duty bound to provide treatment with an undue share of the risk burden.
- AHRQ Publications No. 05-0043, Bioterrorism and other public health emergencies: Altered standards of care in mass casualty event, April 2005.

Commentary: Responding More Broadly and Ethically

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The AMA's Council on Ethical and Judicial Affairs' position statement on "Disaster Preparedness and Response" is a welcome discussion of an important issue: the extent to which physicians have a responsibility to treat people affected by disasters in which

All authors contributed fully to drafting and shaping this paper.

the nature, source, and cause of the harm is unclear and where the risk is largely unknown.

The AMA paper considers historical accounts of physician behavior in response to epidemics and disease outbreaks. It reflects on findings from a national survey in which 80% of physicians claimed they would continue to care for people in the event of an outbreak of "an unknown but potentially deadly illness," whereas fewer (55%) accepted that there is an obligation to do so.¹ The survey found physicians are more willing to volunteer when they have been prepared to treat victims of bioterror, a point supported in the AMA paper in its discussion of "sound preparedness strategies."

The position statement concludes that physicians have an obligation to render aid and, although this obligation is not absolute, it increases with the degree of need, the proximity of those harmed, the capacity to treat, and the lack of other sources of assistance.

Although the AMA position statement is a contribution to the debate, we believe the approach to be too narrow, both in its treatment of disaster and in the range of responses put forward. We propose a broader framing for this issue and a wider ethical basis for analysis.

Framing the Issue(s): Broadening the Notion of Disaster

The AMA paper focuses on individuals responding to unknown or dangerous infectious diseases and to bioterrorism. This perspective is too narrow. Within this last year we have seen terrorist attacks on public transport systems, devastating earthquakes, tsunamis, hurricanes and floods, and famine resulting from protracted violent political conflict. In all these cases, adequate responses have depended on many individuals acting in concert.

Lack of preparedness, such as in New Orleans before and after Hurricane Katrina, delays humanitarian relief and exacerbates the misery. For all these reasons we suggest that the understanding of "disaster" and suggestions for adequate preparedness to respond be framed more broadly.

The AMA paper is limited to local and national events and recognizes "proximity" as a key factor in an "obligation" to respond. Hurricane Katrina underscored this moral obligation by exposing local, state, and federal governments to severe criticism for their lack of adequate preparation and response to a predicted disaster at home. We suggest, however, that not only is there an obligation to respond nationally, but also to respond to crises beyond local and national boundaries.² We are concerned that the AMA paper reinforces an insular and limited understanding of the relationship of physicians to those harmed by catastrophe.

Nussbaum argues that cultivating humanity in the contemporary world requires that we see ourselves as "not simply citizens of some local region or group but also, and above all, as human beings bound to all other human beings by ties of recognition and concern." ³

Most developed countries have the capacity to mount a response and be on the ground almost anywhere in the world within 24 hours. The issue in any major disaster, both at home and abroad, is preparation and the ability to render timely and effective assistance to those experiencing significant adversity. In New Orleans, there was no adequate response for several days. Conversely, following the December 26 tsunami, there was an influx of foreign medical and other personnel on short-term "relief missions" to places such as Aceh and Sri Lanka. However, many were poorly prepared. Their motivation to assist was gratefully acknowledged, but there has been criticism of a lack of awareness and sensitivity to local capacities and processes. This highlights a need for those coming from outside the affected populations to work respectfully with local communities and agencies. Both of these situations-Hurricane Katrina and the December 26 Tsunamihighlight a need for prior training, planning, and development of the capacity of agencies to coordinate willing volunteers. This is a practical issue and quite different from a moral argument that responsibility is greater when disaster confronts us at home rather than in distant lands.

In confining itself to a notion of acute disaster, the AMA provides some guidance to the individual physician challenged by single events, such as isolated threats or potential occurrences of bioterrorism or terrorist attacks on a small scale. However, the most significant challenges to humankind are chronic and complex humanitarian disasters characterized by structural inequalities, poverty, and state and intergroup violence. O'Neill also stresses the importance of looking beyond narrow borders and keeping in mind the relationship between the developed and developing worlds:

In failing to look beyond boundaries we fail to take into account the fact that boundaries are now multiply porous. Health problems travel across boundaries not only because diseases travel, but because the mirror image of a global configuration of social and economic power is a global configuration of poverty and ill health.⁴

Developed countries are not innocent bystanders in relation to crises that are caused or exacerbated by poverty⁵; neither can they simply ignore these events.

The AMA paper prompts the physician to consider her position in relation to individuals requiring medical treatment. The ethical questions that arise at a population level—concerns about public health and health promotion responsibilities—remain largely unanswered. Moreover, an adequate external response to any disaster, whether acute or on-going, necessarily involves concerted and coordinated responses by individuals acting together as members of governmental or nongovernmental, local or international, public or private organizations.

Ethical Basis for Analysis

The AMA paper relies on a Kantian (duty-based) approach to ethics. Kant conceived of ethics in terms of duty or obligation, defined in rational terms. Although duty to treat is one element of a doctor's response, it is not the only, or even the strongest, motivation for going to the aid of another person. Questions also arise in relation to imposing an obligation to treat on health professionals when they may themselves be exposed to risk of extreme harm.

What is significant about human beings is their willingness to respond to others in crises even in the face of personal risk. Although not true of all, it is remarkable how many volunteer in such circumstances. We suggest that a more ethical and effective stance is to rely on, and build on, a deep humanitarian impulse to care for others. Van Hooft describes this as "a primordial motivational field" that he calls "deep caring." Ethical models that give a better account of this are "virtues ethics" and "ethics of care."

The responses to Ebola virus, SARS, and avian influenza outbreaks, as well as the early response to HIV/AIDS, demonstrate this. Such "deep caring" has not, however, been manifest in the

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response to pressing and compounding crises and disasters in distant places such as Darfur in West Sudan, where militia have terrorized and displaced millions of people, or in Niger, where we have been shamed to act to avert further catastrophe. Clearly, a better understanding of the conditions leading to an effective humanitarian response is required. It may be that the most significant factors are an understanding of ourselves as "human beings bound to all other human beings by ties of recognition and concern,"8 alongside practical and organizational preparedness, which includes the existence of agencies with a capacity to respond.

There are some situations, such as in Louisiana, where governments have a duty to respond and should, if necessary, have personnel conscripted to fulfill this duty. There are other situations, however, where it may be more appropriate to rely on volunteers. We need not impose a duty when a different approach, such as an ethics of care, would recognize and support a freely given response. A multifaceted response to disaster would reinforce a qualified professional duty and obligation to go to the assistance of those harmed in disasters. However, in other situations, for example, where there is danger to those rendering assistance, it may be more ethical and effective to rely on caring and humane responses of individuals, nongovernmental agencies, and governmental bodies acting in concert. Making sure this happens requires prior training of individual healthcare professionals, coordinating organizations and nurturing the conditions for effective humanitarian responsiveness.

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