Ethical Considerations

Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement

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e-Appendix 1.

ACCP Ethics and Culture:
Literature Search and Key Questions

Literature Search Completed by:
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**ETHICS & CULTURE***
*results only intended to provide additional background on the topic

*Database searched:* MEDLINE/PubMed only

*Limits used:* Publication date 2007-2012 (not limited by language; country)

*Search strategies:*


Limited to 2007-2012 = 490


**Selected Search Results**

Note: included ethical issues as related to disasters/scarc resources; cultural beliefs and influences on behavior before/during/after a disaster. There is/will be some overlap with the resource allocation & evacuation group

Online supplements are not copyedited prior to posting.
Abstract Feelings of uncertainty are a central feature of the disaster experience. Surprisingly, though, there is very little systematic quantitative research about the impact of uncertainty on disaster survivors. Moreover, communal coping has increasingly received attention as a potential buffer of the negative effects of stressors but that literature is also limited in its application to disasters. This investigation applies research in the domain of uncertainty, together with the Theoretical Model of Communal Coping to better understand the experience of a community exposed to three wildfires in a one year period. A random-digit dialing procedure was used to gather data from 402 individuals. Participants completed measures of mental health, uncertainty, and communal coping in the context of their experience with the most personally stressful of the three wildfires. All analyses were examined separately for those who were evacuated and those who were not. Results support the negative impact of uncertainty across both evacuated and nonevacuated sub-samples and show a strong buffering role for communal coping among those who evacuated. The implications of these findings for the understanding of wildfire survivors' experiences are noted and future directions are proposed.


BACKGROUND: The Japan earthquake and tsunami of 11 March 2011 severely damaged the Fukushima Daiichi nuclear plant. After learning of the radiation leak, the Japanese government issued an evacuation directive for residents within 20 km of the plant a day after the earthquake. Approximately 1 month later, this area was designated a 'high alert zone' and effectively sealed-off. The purpose of this report is to examine these measures from an ethical perspective, and consider what lessons can be drawn from this experience. METHODS: Analytic discussion. RESULTS: We examine the measures from an ethical perspective and argue that if the government's aim was to avoid health risks posed by radiation exposure, then ordering compulsory expulsion of all residents cannot be ethically justified. We assert that the government may not have ordered the mandatory evacuation solely based on health risks, but rather to maintain public order. CONCLUSION: Careful scrutiny of the case revealed that this public health intervention involved an objective completely unrelated to public health, and that disguising these policies using the reasonable and acceptable purpose of public health made it easier to justify undue restriction of individual liberty.


The tragedy of Hurricane Katrina in New Orleans confirmed that effective implementation of public health preparedness programs and policies will require compliance from all racial and ethnic populations. This study reviews current resources and limitations and suggests future directions for integrating diverse communities into related strategies. It documents research and interventions, including promising models and practices that address preparedness for minorities. However, findings reveal a general lack of focus on diversity and suggest that future preparedness efforts need to fully integrate factors related to race, culture, and language into risk communication, public health training, measurement, coordination, and policy at all levels.


INTRODUCTION: As a result of recent events, including natural disasters and pandemics, mass
critical care planning has become a priority. In general, planning involves limiting the scope of disasters, increasing the supply of medical resources, and allocating scarce resources. Entities at varying levels have articulated ethical frameworks to inform policy development. In spite of this increased focus, children have received limited attention. Children require special attention because of their unique vulnerabilities and needs. METHODS: In May 2008, the Task Force for Mass Critical Care published guidance on provision of mass critical care to adults. Acknowledging that the critical care needs of children during disasters were unaddressed by this effort, a 17-member Steering Committee, assembled by the Oak Ridge Institute for Science and Education with guidance from members of the American Academy of Pediatrics, convened in April 2009 to determine priority topic areas for pediatric emergency mass critical care recommendations. Steering Committee members established subgroups by topic area and performed literature reviews of MEDLINE and Ovid databases. Draft documents were subsequently developed and revised based on the feedback from the Task Force. The Pediatric Emergency Mass Critical Care Task Force, composed of 36 experts from diverse public health, medical, and disaster response fields, convened in Atlanta, GA, on March 29-30, 2010. This document reflects expert input from the Task Force in addition to the most current medical literature. TASK FORCE RECOMMENDATIONS: The Ethics Subcommittee recommends that surge planning seek to provide resources for children in proportion to their percentage of the population or preferably, if data are available, the percentage of those affected by the disaster. Generally, scarce resources should be allocated on the basis of need, benefit, and the conservation of resources. Estimates of need, benefit, and resource utilization may be more subjective or objective. While the Subcommittee favors more objective methods, pediatrics lacks a simple, validated scoring system to predict benefit or resource utilization. The Subcommittee hesitantly recommends relying on expert opinion while pediatric triage tools are developed. If resources remain inadequate, they should then be allocated based on queuing or lottery. Choosing between these methods is based on ethical, psychological, and practical considerations upon which the Subcommittee could not reach consensus. The Subcommittee unanimously believes the proposal to favor individuals between 15 and 40 yrs of age is inappropriate. Other age-based criteria and criteria based on social role remain controversial. The Subcommittee recommends continued work to engage all stakeholders, especially the public, in deliberation about these issues.


In times of contagion, the key role of nurses brings fears, dangers, and unique demands. The ethics of such challenges need to be explored and understood. Using Callahan's framework for thinking ethically and Taylor's "worries" of modern life, the author elucidates some of the challenges and then argues that the current approach to pandemic ethics, with its reliance on moral reasoning, is insufficient to guide nurses' ethical actions. Relational ethics, which explicitly situates ethics within relationships and our commitment to one another, and which recognizes that context matters in ethical decision-making, is offered as a viable alternative for nurses in considering how to respond.


Although bioethics societies are developing standards for clinical ethicists and a code of ethics, they have been castigated in this journal as "a moral, if not an ethics, disaster" for not having completed this task. Compared with the development of codes of ethics and educational standards in law and medicine, however, the pace of professionalization in bioethics appears appropriate. Assessed by this metric, none of the charges leveled against bioethics are justified. The specific charges leveled against the American Society for Bioethics and Humanities (ASBH) and its Core Competencies report are analyzed and rejected as artifacts of an ahistoric conception of the stages by which organizations professionalize. For example, the charge that the ASBH should provide...
definitive criteria for what counts as "medical ethics consultation" antecedent to further progress towards professionalization is assessed by comparing it with the American Medical Association's decades-long struggle to define who can legitimately claim the title "medical doctor." Historically, clarity about who is legitimately a doctor, a lawyer - or a "clinical ethicist" - is a byproduct of, and never antecedent to, the decades-long process by which a field professionalizes. The charges leveled against ASBH thus appear to be a function of impatient, ahistoric perfectionism.


OBJECTIVES: In the face of all-hazards preparedness challenges, local and state health department personnel have to date lacked a discrete set of legally and ethically informed public health principles to guide the distribution of scarce resources in crisis settings. To help address this gap, we convened a Summit of academic and practice experts to develop a set of principles for legally and ethically sound public health resource triage decision-making in emergencies. METHODS: The invitation-only Summit, held in Washington, D.C., on June 29, 2006, assembled 20 experts from a combination of academic institutions and nonacademic leadership, policy, and practice settings. The Summit featured a tabletop exercise designed to highlight resource scarcity challenges in a public health infectious disease emergency. This exercise served as a springboard for Summit participants' subsequent identification of 10 public health emergency resource allocation principles through an iterative process. RESULTS: The final product of the Summit was a set of 10 principles to guide allocation decisions involving scarce resources in public health emergencies. The principles are grouped into three categories: obligations to community; balancing personal autonomy and community well-being/benefit; and good preparedness practice. CONCLUSIONS: The 10 Summit-derived principles represent an attempt to link law, ethics, and real-world public health emergency resource allocation practices, and can serve as a useful starting framework to guide further systematic approaches and future research on addressing public health resource scarcity in an all-hazards context.


A U.K. Pandemic Influenza Contingency Plan was developed in 2006 but little research has since been carried out as to how ethically acceptable it will be to society. A survey containing two hypothetical scenarios was distributed to 1,018 hospital staff. The survey considered their attitudes to the professional and ethical responsibilities of healthcare workers, and to resource allocation on the intensive care unit (ICU). Of those distributed, 406 (40%) surveys were returned. During a pandemic, 320 (79%) healthcare professionals would continue to work and 339 (83%) felt it would be unprofessional for doctors to leave work. Only 218 (54%) chose the same patient for the last ICU bed. Most staff surveyed felt they should (professionally) and would (voluntarily) work during a pandemic despite high personal risk. A wide diversity of opinion existed regarding resource allocation of ICU beds. These ethical issues require open debate to ensure U.K. pandemic plans are ethically acceptable and practically applicable.


Management of pandemic influenza relies on complex coordination of many different dimensions of the health and social care systems, emergency services, levels of national and local government, civil society, communications and media, and cultural expectations. Law is one small but important component of those arrangements, which touch on fundamental ethical debates. This review demonstrates that the Asian region is actively engaging those issues in diverse ways in light of their varied socioeconomic and cultural backgrounds, but scope remains for prioritising further research into these relationships.
Preparations for large-scale disasters have tended to focus on triage schema, stockpiling of materials, and other logistical concerns. Less attention has been given to the myriad of distressing and almost unthinkable ethically charged dilemmas that will emerge at the bedside during a catastrophe, and how they may be best managed. Yet, it is these bedside issues that may limit or thwart the effectiveness of disaster planning, and, therefore, they ought to be carefully considered.

During a catastrophe that disables the health system, ethically charged situations will undoubtedly emerge that will challenge patients, relatives, clinicians, and others involved in health delivery. This second of two special sections of The Journal of Clinical Ethics includes discussions of the implications of a system collapse on particularly vulnerable member of society, children, pregnant women, and those who are socio-economically, culturally, and linguistically disempowered. Additionally, it offers insights into the processes used by committees to plan for catastrophic care.


OBJECTIVES: The purpose of this article is to look at how prepared people in communities outside the main areas devastated by Hurricanes Katrina and Rita thought they were for those storms and for major hurricanes in the near future, what factors were related to why people did not evacuate, and what concerns people had in communities that took in evacuees from the hurricanes.
METHODS: Telephone interviews were conducted with randomly selected adults in Baton Rouge, Houston, Dallas, and Mississippi/Alabama (excluding the immediate Gulf Coast) to assess respondents' knowledge, attitudes, and behaviors about hurricane preparedness and response to Hurricanes Katrina and Rita. RESULTS: The surveys found a sizeable proportion of respondents who might not, for a number of reasons, comply with future orders to evacuate. A substantial proportion reported that they were not prepared for another major hurricane and indicated a desire for more information about how to prepare for future hurricanes. In communities that reported taking in large numbers of evacuees, residents expressed concern about the impact of the evacuees on their community. CONCLUSION: Evacuating communities involves a number of concrete problems that were not adequately addressed in the cases of Hurricanes Katrina and Rita. Responses to these surveys indicate a need for more comprehensive hurricane disaster planning.

As the number of people in need of help increases, the degree of compassion people feel for them ironically tends to decrease. This phenomenon is termed the collapse of compassion. Some researchers have suggested that this effect happens because emotions are not triggered by aggregates. We provide evidence for an alternative account. People expect the needs of large groups to be potentially overwhelming, and, as a result, they engage in emotion regulation to prevent themselves from experiencing overwhelming levels of emotion. Because groups are more likely than individuals to elicit emotion regulation, people feel less for groups than for individuals.

In Experiment 1, participants displayed the collapse of compassion only when they expected to be asked to donate money to the victims. This suggests that the effect is motivated by self-interest. Experiment 2 showed that the collapse of compassion emerged only for people who were skilled at emotion regulation. In Experiment 3, we manipulated emotion regulation. Participants who were told to down-regulate their emotions showed the collapse of compassion, but participants who were told to experience their emotions did not. We examined the time course of these effects using a dynamic rating to measure affective responses in real time. The time course data suggested that
participants regulate emotion toward groups proactively, by preventing themselves from ever experiencing as much emotion toward groups as toward individuals. These findings provide initial evidence that motivated emotion regulation drives insensitivity to mass suffering.


When disaster disrupts healthcare and other systems, the ethical allocation of resources should follow principles of justice, defined as fairness, established for normal clinical practice. Standards of clinical practice may be altered during disaster, but ethical standards must remain centered on prioritizing the treatment of patients according to need and the effectiveness of treatment. Should resources become extremely limited, it is fair to restrict their use to patients who have the highest needs, provided that the intervention is effective. When resources become more available, patients with lower priority can be increasingly accommodated.


This Note examines the legality of physicians treating patients near the end of life with risky pain medication, specifically during an extreme emergency situation. The issues discussed include whether such treatment should be criminalized and, if criminalized, what standard should be used to determine culpability. This Note proposes that physicians should not be shielded from the criminal justice system, but that the standard of double effect intent should be expressly adopted in the adjudication of such cases.


After the Severe Acute Respiratory Syndrome (SARS) experience in 2003, ethics has found a place in discourses on pandemic planning and public health. It is no longer enough to merely have action strategies in a pandemic plan; both research literature and the World Health Organization recommend that one has to further ensure that the outcome of such action is fair to all concerned, and is in conformity with relevant ethical values and considerations. India's pandemic plan suffers from a glaring omission in this aspect. Taking strategies and responses during the 2009 A H1N1 outbreak in India as instances, this paper identifies the lessons to be learnt from this experience and argues that these raise ethical issues ingrained in pandemic planning which must be addressed. It ends with the suggestion that the Indian health authorities should add an ethical dimension to the national pandemic plan, as has been recommended by the World Health Organization and by post-SARS studies.


BACKGROUND: The flooding of New Orleans after Hurricane Katrina revealed the disproportionate vulnerability of ethnic minority communities for emergency preparedness, disaster relief and health. Nurses need to analyse Katrina's health consequences for the most vulnerable segments of our society. AIM: To examine factors contributing to differential health outcomes among the New Orleans Vietnamese community in response to Katrina. METHODS: A sample of 113 adult Vietnamese Katrina survivors from New Orleans was recruited. A mixed-method approach, including survey and focus groups, was used to collect data. Survey questions were modified from standardized instruments to evaluate survivors' health status and factors contributing to health outcomes. Multivariate and content analysis were used to investigate effects of prior trauma, financial strain, social support and acculturation level in predicting survivors' health outcomes. RESULTS: Findings suggested financial strain was the strongest risk factor for Vietnamese
survivors' post-traumatic stress disorder (PTSD) symptoms, and physical and mental health post-disaster; while social support was a strong protective factor for health. Survivors who perceived higher impact from previous traumatic experiences had poorer physical health, but not PTSD symptoms or poor mental health after controlling for financial strain and social support, suggesting complex relationships among these measures in predicting PTSD symptoms and health. Less acculturated individuals also reported higher levels of PTSD symptoms and poorer physical health. CONCLUSIONS: Catastrophic events like Katrina can result in disproportionate risk of negative health outcomes among vulnerable populations. Nurses should take into account prior trauma, financial strain, social support network and acculturation level, to adequately address survivors' needs.


The ethics of managing obstetric patients in medical disasters poses ethical challenges that are unique in comparison to other disaster patients, because the medical needs of two patients--the pregnant patient and the fetal patient--must be considered. We provide an ethical framework for doing so. We base the framework on the justice-based prevention of exploitation of populations of patients, both obstetric and non-obstetric, in medical disasters. We use the concept of exploitation to identify a spectrum from ethically acceptable, to ethically challenging, to ethically unacceptable, management of obstetric patients in medical disasters. We also address the ethics of the care of obstetric and neonatal patients when the resources of a hospital are completely overwhelmed in a large-scale medical disaster.


The evaluation of medical decision-making capacity and provision of emergency treatment in the acute care setting may present a significant challenge for both physicians-in-training and attending physicians. Although absolutely essential to the proper care of patients, recalling criteria for decision-making capacity may prove cumbersome during a medical emergency. Likewise, the requirements for providing emergency treatment must be fulfilled. This article presents a mnemonic (CURVES: Choose and Communicate, Understand, Reason, Value, Emergency, Surrogate) that addresses the abilities a patient must possess in order to have decision-making capacity, as well as the essentials of emergency treatment. It may be used in conjunction with, or in place of, lengthier capacity-assessment tools, particularly when time is of the essence. In addition, the proposed tool assists the practitioner in deciding whether emergency treatment may be administered, and in documenting medical decisions made during an acute event.


BACKGROUND: Prior to the development of written policies and procedures for pandemic influenza, worker perceptions of ethical and workforce issues must be identified. OBJECTIVE: To determine the relationship between healthcare worker (HCW) reporting willingness to work during a pandemic and perception of job importance, belief that one will be asked to work, and sense of professionalism and to assess HCW's opinions regarding specific policy issues as well as barriers and motivators to work during a pandemic. METHODS: A survey was conducted in HCWs at The Children's Hospital in Denver, Colorado, from February to June 2007. Characteristics of workers reporting willingness to work during a pandemic were compared with those who were unwilling or unsure. Importance of barriers and motivators was compared by gender and willingness to work. RESULTS: Sixty percent of respondents reported willingness to work (overall response rate of 31%). Belief one will be asked to work (OR 4.6, P < 0.0001) and having a high level of professionalism (OR 8.6, P < 0.0001) were associated with reporting willingness to work. Hospital
infrastructure support staffs were less likely to report willingness to work during a pandemic than clinical healthcare professionals (OR 0.39, P < 0.001). Concern for personal safety, concern for safety of family, family's concern for safety, and childcare issues were all important barriers to coming to work. CONCLUSIONS: Educational programs should focus on professional responsibility and the importance of staying home when ill. Targeted programs toward hospital infrastructure support and patient and family support staff stressing the essential nature of these jobs may improve willingness to work.


As public health agencies prepare for pandemic influenza, it is evident from our experience with Hurricane Katrina that these events will occur in the same social, historical, and cultural milieu in which marked distrust of government and health disparities already exist. This article grapples with the challenges of crisis and emergency risk communication with special populations during a pandemic. Recognizing that targeting messages to specific groups poses significant difficulties at that time, this article proposes a model of community engagement, disaster risk education, and crisis and emergency risk communication to prepare minority communities and government agencies to work effectively in a pandemic, build the capacity of each to respond, and strengthen the trust that is critical at such moments. Examples of such engagement and potential strategies to enhance trust include tools familiar to many health educators.


The complexities and challenges for healthcare providers and their efforts to provide fundamental basic items to meet the logistical demands of an influenza pandemic are discussed in this article. The supply chain, planning, and alternatives for inevitable shortages are some of the considerations associated with this emergency mass critical care situation. The planning process and support for such events are discussed in detail with several recommendations obtained from the literature and the experience from recent mass casualty incidents (MCIs). The first step in this planning process is the development of specific triage requirements during an influenza pandemic. The second step is identification of logistical resources required during such a pandemic, which are then analyzed within the proposed logistics science and art model for planning purposes. Resources highlighted within the model include allocation and use of work force, bed space, intensive care unit assets, ventilators, personal protective equipment, and oxygen. The third step is using the model to discuss in detail possible workarounds, suitable substitutes, and resource allocation. An examination is also made of the ethics surrounding palliative care within the construction of an MCI model to discuss in detail possible workarounds, suitable substitutes, and resource allocation. An examination is also made of the ethics surrounding palliative care within the construction of an MCI and the factors that will inevitably determine rationing and prioritizing of these critical assets to palliative care patients.


The emergence of H1N1 in 2009 shows that it is a mistake to regard the scenario of having to implement pandemic plans as merely hypothetical. This recent experience provides an opportunity to inquire into the current state of pandemic preparedness plans with regard to their ethical adequacy. One aspect that deserves consideration in this context is the disclosure of ethical reasoning. Accordingly, the following is an analysis of examples of pandemic plans and drafts of plans from Southeast Asia and the Western Pacific. It is an analysis of the occurrence of explicit ethical reflection in these documents as well an inquiry into the related question of how ethical reflection can be understood as a constitutive element of ethical pandemic preparedness. In the analysis, different fields of ethical consideration concerning equity, personal rights and accountability are distinguished. There are both pragmatic and genuinely ethical reasons to explicitly address issues of these types in pandemic plans. The extent to which ethical language appears in the national plans in South East Asia and the Western Pacific suggests that there is
limited awareness of ethical considerations, or at least insufficient ethical substantiation of pandemic action. The aim of the analysis is to show that further inclusion of ethical considerations into pandemic plans is ethically demanded. It is of particular significance that these considerations are formulated and remain discernible as instances of ethical deliberation.


This paper aims to highlight three ethical considerations related to influenza pandemic planning and response: ethical allocation of scarce resources; obligations and duties of healthcare workers to treat patients, and the balance between conflicting individual and community interests. Among these, perhaps the most challenging question facing bioethics is how to allocate scarce, life-saving resources given the devastating social and economic ramifications of a pandemic. In such situations, the identification of clear overall goals for pandemic planning is essential in making difficult choices. The dilemma between the duty to save patients and the right to protect the healthcare personnel's own life and health is a key issue. During the course of a pandemic, civil liberties may also be threatened, requiring limits on individual freedom to protect individuals as well as entire communities. Yet, individual liberty should be restricted with great care, and only when alternative approaches are not effective. Pandemic influenza planning and response should be a cooperative and shared responsibility that balances community and individual interests.


INTRODUCTION: Considerable morbidity, mortality, and costs are associated with household emergency situations involving natural hazards and fires. Many households are poorly prepared for such emergency situations, and little is known about the psychosocial aspects of household emergency preparedness. PROBLEM: The aim of this study is to promote a better understanding of homeowners' experiences and perceptions regarding household emergency situations and related preparedness practices. METHODS: A brief survey was administered and three focus group sessions were conducted with homeowners (n = 16) from two metro Atlanta homeowners' associations. The survey inquired about basic demographic information, personal experience with a natural hazard or fire, and awareness of preparedness recommendations. The focus group discussions centered on household emergency preparedness perceptions and practices. RESULTS: Participants defined household emergency preparedness as being able to survive with basic supplies (e.g., water, flashlights) for 48 hours or longer. While most participants had sufficient knowledge of how to prepare for household emergency situations, many did not feel fully prepared or had not completed some common preparedness measures. Concern about protecting family members and personal experience with emergency situations were identified as strong motivations for preparing the household for future emergencies. CONCLUSIONS: The focus group findings indicate that most participants have prepared for household emergency situations by discussing the dangers with family members, stockpiling resources, and taking a CPR or first-aid class. However, to the extent that behavior is influenced, there is a gap between maintaining preparedness levels and internalizing preparedness recommendations. Prevention efforts in Georgia should focus on closing that gap.


Prior research shows that when people perceive the risk of some hazardous event to be low, they are unlikely to engage in mitigation activities for the potential hazard. We believe one factor that can lower inappropriately (from a normative perspective) people's perception of the risk of a hazard is information about prior near-miss events. A near-miss occurs when an event (such as a hurricane), which had some nontrivial probability of ending in disaster (loss of life, property damage), does not because good fortune intervenes. People appear to mistake such good fortune
as an indicator of resiliency. In our first study, people with near-miss information were less likely to purchase flood insurance, and this was shown for both participants from the general population and individuals with specific interests in risk and natural disasters. In our second study, we consider a different mitigation decision, that is, to evacuate from a hurricane, and vary the level of statistical probability of hurricane damage. We still found a strong effect for near-miss information. Our research thus shows how people who have experienced a similar situation but escape damage because of chance will make decisions consistent with a perception that the situation is less risky than those without the past experience. We end by discussing the implications for risk communication.


ABSTRACT: BACKGROUND: Hospitals are cornerstones for health care in a community and must continue to function in the face of a disaster. The Hospital Incident Command System (HICS) is a method by which the hospital operates when an emergency is declared. Hospitals are often ill equipped to evaluate the strengths and vulnerabilities of their own management systems before the occurrence of an actual disaster. The main objective of this study was to measure the decision making performance according to HICS job actions sheets using tabletop exercises. METHODS: This observational study was conducted between May 1st 2008 and August 31st 2009. Twenty three Iranian hospitals were included. A tabletop exercise was developed for each hospital which in turn was based on the highest probable risk. The job action sheets of the HICS were used as measurements of performance. Each indicator was considered as 1, 2 or 3 in accordance with the HICS. Fair performance was determined as < 40%; intermediate as 41-70%; high as 71-100% of the maximum score of 192. Descriptive statistics, T-test, and Univariate Analysis of Variance were used. RESULTS: None of the participating hospitals had a hospital disaster management plan. The performance according to HICS was intermediate for 83% (n = 19) of the participating hospitals. No hospital had a high level of performance. The performance level for the individual sections was intermediate or fair, except for the logistic and finance sections which demonstrated a higher level of performance. The public hospitals had overall higher performances than university hospitals (P = 0.04). CONCLUSIONS: The decision making performance in the Iranian hospitals, as measured during table top exercises and using the indicators proposed by HICS was intermediate to poor. In addition, this study demonstrates that the HICS job action sheets can be used as a template for measuring the hospital response. Simulations can be used to assess preparedness, but the correlation with outcome remains to be studied.


The emergence of virulent avian influenza A subtypes with potential to evolve into novel human subtypes prompted directives from the World Health Organisation recommending that countries prepare for a pandemic. In response the Australian government developed the Australian Health Management Plan for Pandemic Influenza (AHMPPI), which includes strategies to contain and/or manage a pandemic. To implement these strategies successfully, community compliance is necessary. Our qualitative study investigated, through a deliberative forum, the extent to which the antiviral drug and vaccine allocation of the AHMPPI corresponds with community views about the priority groups. We used Mary Douglas' Grid/Group analysis to analyse the results, which suggested that the AHMPPI's allocation strategy corresponds well with community views with both based on a hierarchical structure. There are some differences concerning community involvement in the decision process and information provision to the public, for which our study provides recommendations.

This paper examines three international healthcare security systems as they relate to patient surge in Canada, Israel, and the United States. Its purpose is to compare the systems, to highlight unique characteristics that define those systems, and to initiate the development of best practices that transcend national boundaries. Several significant national characteristics of demographics, healthcare systems, and political climate, among others, present challenges to translating best practices among these three countries. However, we have found that best practice strategies exist in areas of communications, coordination, building design, space adaptability, and patient routing (both from the community to the hospital, as well as within the hospital) that can be shared and incorporated into the healthcare preparedness efforts in all three countries.


Anti-theory is a multi-faceted critique of moral theory which, it appears, is undergoing something of reassessment. In a recent paper Hamalainen discusses the relevance of an anti-theoretical perspective for the activity of applied ethics. This paper explores her view of anti-theory. In particular I examine its relevance for understanding the formal guidance on pandemic flu planning issues by the Department of Health (DoH) in the UK and some subsequent discussions around triage and reverse triage decisions which may be considered by both Primary and Secondary Care Trusts (PCTs and SCTs) (On the division between Primary and Secondary Care Trusts in the UK National Health Service see: http://www.nhs.uk/NHSEngland/thenhs/about/Pages/nhsstructure.aspx [Accessed August 2010]).

Following Hamalainen in contrasting reflective equilibrium with her anti-theory inspired suggestion of an instrumental approach to moral theory in practice I demonstrate how this understanding complements the diversity of our intuitive moral judgements. Consequently I suggest that this anti-theoretical instrumental approach is in greater accord with the conditions under which such policy planning and decision making is, or will be, made. Furthermore, on the grounds of keeping open the ethical dimensions of medical practice in conditions of uncertainty, i.e. during a pandemic, I suggest that the anti-theoretical instrumental perspective is, ethically, the preferable approach to producing such policies and guidelines.


On January 12, 2010, a 7.0 Richter earthquake devastated Haiti and its public health infrastructure leading to a worldwide humanitarian effort. The United States sent forces to Haiti's assistance including the USNS Comfort, a tertiary care medical center on board a ship. Besides setting a transparent triage and medical regulating system, the leadership on the Comfort instituted a multidisciplinary Healthcare Ethics Committee to assist in delivering the highest level efficient care to the largest number of victims. Allocation of resources was based on time-honored ethics principles, the concept of mass casualty triage in the setting of resource constraints, and constructs developed by the host nation's Ministry of Health. In offering aid in austere circumstances, healthcare practitioners must not only adhere to the basic healthcare ethics principles but also practice respect for communities, cultures, and traditions, as well as demonstrate respect for the sovereignty of the host nation. The principles outlined herein should serve as guidance for future disaster relief missions. This work is in accordance with BUMEDINST 6010.25, Establishment of Healthcare Ethics Committees.


Large-scale infectious epidemics present the medical community with numerous medical and ethical challenges. Recent attention has focused on the likelihood of an impending influenza pandemic caused by the H5N1 virus. Pregnant women in particular present policymakers with great
challenges to planning for such a public health emergency. By recognizing the specific considerations needed for this population, we can preemptively address the issues presented by infectious disease outbreaks. We reviewed the important ethical challenges presented by pregnant women and highlighted the considerations for all vulnerable groups when planning for a pandemic at both the local and the national level.


Increases in international travel and migratory flows have enabled infectious diseases to emerge and spread more rapidly than ever before. Hence, it is increasingly easy for local infectious diseases to become global infectious diseases (GIDs). National governments must be able to react quickly and effectively to GIDs, whether naturally occurring or intentionally instigated by bioterrorism. According to the World Health Organisation, global partnerships are necessary to gather the most up-to-date information and to mobilize resources to tackle GIDs when necessary. Communicable disease control also depends upon national public health laws and policies. The containment of an infectious disease typically involves detection, notification, quarantine and isolation of actual or suspected cases; the protection and monitoring of those not infected; and possibly even treatment. Some measures are clearly contentious and raise conflicts between individual and societal interests. In Europe national policies against infectious diseases are very heterogeneous. Some countries have a more communitarian approach to public health ethics, in which the interests of individual and society are more closely intertwined and interdependent, while others take a more liberal approach and give priority to individual freedoms in communicable disease control. This paper provides an overview of the different policies around communicable disease control that exist across a select number of countries across Europe. It then proposes ethical arguments to be considered in the making of public health laws, mostly concerning their effectiveness for public health protection.


Growing recognition of the threat of pandemic influenza to global health has led to increased emphasis on pandemic influenza preparedness planning. Previous analysis of national pandemic preparedness plans has revealed that those plans paid scant attention to the needs and interests of the disadvantaged. This paper investigates those findings via critical discourse analysis of the same plans as well as World Health Organization guidance documents. The analysis reveals that the texts operate within and as parts of an ordered universe of discourse. Among the six discourses which emerge from the analysis the scientific, political, and legal dominate the social, cultural, and ethical. This order of discourse delineates a specific regime of truths within which the lives, needs, and interests of the disadvantaged are masked or neglected. Unless the plans recognize their discursive construction, implementation of the policies and practices they prescribe runs the risk of further disadvantaging those very populations most likely to require protection.


Although the timing and severity of the next influenza pandemic is impossible to predict, there is broad agreement that one will occur. Preparation is vital to mitigating its effects. A severe influenza pandemic like that which began in 1918 would be unlike other disasters in nature, scale, and duration. It could cripple normal business operations and disrupt global distribution of essential goods and services. It could force ethical decisions that many in a country accustomed to relative abundance are poorly prepared to make. Although sound evidence and clinical and public health
expertise are needed to make informed decisions, so is an understanding of our common and diverse values. This article outlines some of the challenges the state would face during a pandemic, especially concerning the rationing of resources and care. It also describes a process currently underway to develop guidelines for how the state should approach the ethical questions that would arise.


PURPOSE: To make explicit the perinatal nurses' shared meanings of their lived experience while providing nursing care in the New Orleans area during the disaster of Hurricane Katrina. STUDY DESIGN: Interpretative phenomenology. METHODS: Semi-structured, in-depth interviews were conducted with 16 perinatal nurses 9 to 18 months after they worked in obstetrical and newborn hospital settings in the Greater New Orleans area during the Hurricane Katrina disaster. Van Manen's process of reflective thematic analysis-guided data analysis was used. RESULTS: Themes and subthemes included (1) duty to care (back to the basics, empathy, and advocacy in action); (2) conflicts in duty; (3) uncertain times: chaos after the storm (evacuation: routes through uncertainty, hopelessness, abandonment, and/or fear); (4) strength to endure; (5) grief: loss of relationships, identity, and place; (6) anger; and (7) feeling right again. CLINICAL IMPLICATIONS: Nurses who work during disasters must live through the uncertainty of the situation and be prepared to adapt to the needs that arise in patient care situations and self-preservation. Excellent basic nursing skills, intuitive problem solving, and a sense of staff unity are primary resources. Nurses and other caregivers need ongoing supportive interventions to rebound from the experience and cope with symptoms associated with trauma exposure.


This paper seeks to understand evacuation behaviour in a case of spontaneous evacuation. During the Second Lebanon War of 2006, more than one-third of residents in north Israel spontaneously evacuated--the remainder stayed in situ. Using a telephone survey of 665 respondents residing in north Israel, we were able to characterise the behaviour of evacuees and non-evacuees. The main reasons cited for evacuating were fear of injury to self or family, the effect on children, inability to remain in a protective space, and family pressure. The main reasons cited for remaining at home were no suitable alternative, did not perceive a high level of danger, had to go to work, and there is no place like home. There were no significant differences with regard to most socio-demographic characteristics of the population. These findings should aid emergency managers in preparing the population for a future emergency and in engaging in effective dialogue with the population during an emergency on the evacuation option.


Public risk perceptions of mass disasters carry considerable influences, both psychologically and economically, despite their oft-times imprecise nature. Prior research has identified the presence of an optimistic bias that affects risk perception, but there is a dearth of literature examining how these perceptions differ among cultures—particularly with regard to mass disasters. The present study explores differences among Japanese, Argentinean, and North American mental health workers in their rates of the optimistic bias in risk perceptions as contrasted between natural disasters and terrorist events. The results indicate a significant difference among cultures in levels of perceived risk that do not correspond to actual exposure rates. Japanese groups had the highest risk perceptions for both types of hazards and North Americans and Argentineans had the lowest risk perceptions for terrorism. Additionally, participants across all cultures rated risk to self as lower than risk to others (optimistic bias) across all disaster types. These findings suggest that cultural factors may have a greater influence on risk perception than social exposure, and that the belief that one is more immune to disasters compared to others may be a cross-cultural phenomenon.

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STUDY OBJECTIVE: To date, no German triage tool with proven reliability and validity exists. The goal of this project is to translate and culturally adapt the Emergency Severity Index (ESI) and to assess reliability and validity of the German version. METHODS: The ESI was translated following principles recommended for the translation and cultural adaptation of instruments. We performed a prospective, single-center cohort study. Reliability was assessed by calculating Cohen's weighted kappa for agreement of 2 experts who reviewed the triage nurses' notes. To assess validity, associations of the number of resources, hospitalization, admission to intensive care, length of stay, and severity of illness were analyzed. RESULTS: The German version of the ESI was implemented in the emergency department of a university hospital. The observed kappa for agreement of 2 experts who reviewed the triage nurses' notes was 0.81. Conclusion: This ESI can be used reliably and validly in the emergency department.

POSSIBLE CONFLICTS OF INTEREST: None.

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POSSIBLE CONFLICTS OF INTEREST: None.

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stay, and mortality with the assigned ESI level were investigated. RESULTS: Only small cultural adaptations had to be made during the translation process. Interrater agreement was high (kappa(w) = 0.985) in a sample of 125 patients. For the assessment of validity, a sample of 2,114 patients was used. Spearman’s rank correlation coefficient between ESI category and number of resources was rho = -0.567. The association (Kendall’s tau) between ESI category and disposition, and hospitalization was tau = -0.429 and tau = -0.453, respectively. The areas under the curves for the predictive ability of the ESI for hospitalization in general and hospitalization to an ICU were 0.788 and 0.856, respectively. The association between emergency department length of stay and ESI category was also significant (Kruskal-Wallis chi(2) = 450.8; df = 4; P < .001). Furthermore, the association between ESI category and survival probability was significant (log-rank chi(2) = 36.06; df = 3; P < .001). CONCLUSION: Translation of the ESI following guidelines was feasible and resulted in a reliable and valid German version.


A well-known thought experiment has us ponder a lottery system that selects one person as the source of transplantable organs for two others. The organs are forcibly harvested and the "donor" dies, whereas the other two patients live. The Survival Lottery is supposed to get at the distinction between killing and letting die, but it is also a challenge to beliefs about moral duties: what are my obligations if my life could be used to save yours and another person's as well? A less extreme version of this thought experiment might have us imagining that officials of the public healthcare system would devise a similar lottery in the aftermath of a large-scale medical emergency. We could imagine that a natural disaster or an attack using biological weapons, for example, has so diminished the ability to provide public health care that in some communities, officials might consider implementing a lottery. To avoid the concerns about outright killing of selectees, officials might offer a wide range of participation in medical practice and research, not just organ allocation. Officials could ensure that no significant risks are involved, and selectees could in various ways be compensated. Would it be possible to ethically justify this "Healthcare Lottery" on the grounds that it was a temporary, yet necessary, infringement on autonomy?


OBJECTIVE: Recent experiences in the United States with unprecedented terrorist attacks (9/11) and a devastating natural disaster (Hurricane Katrina) have demonstrated that the medical care of mass casualties during such disasters poses ethical problems not normally experienced in civilian health care. It is important to 1) identify the unique ethical challenges facing physicians who feel an obligation to care for victims of such disasters and 2) develop a national consensus on ethical guidelines as a resource for ethical decision making in medical disaster relief. STUDY DESIGN: A survey of pertinent literature was performed to assess experience and opinions on the condition of medical care in terrorist attacks and natural disasters, the ethical challenges of disaster medical care, and the professional responsibilities and responsiveness in disasters. CONCLUSIONS: It is necessary to develop a national consensus on the ethical guidelines for physicians who care for patients, victims, and casualties of disasters, and to formulate a virtue-based, yet practical, ethical approach to medical care under such extreme conditions. An educational curriculum for medical students, residents, and practicing physicians is required to best prepare all physicians who might be called upon, in the future, to triage patients, allocate resources, and make difficult decisions about treatment priorities and comfort care. It is not appropriate to address these questions at the time of the disaster, but rather in advance, as part of the ethics education of the medical profession. Important issues for resolution include inpatient and casualty triage and prioritization, medical liability, altered standards of care, justice and equity, informed consent and patient

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autonomy, expanding scope of practice in disaster medicine, and the moral and ethical responsibilities of physicians to care for disaster victims.


Individual perception of risk has consistently been considered an important determinant of hurricane evacuation in published studies and reviews. Adequate risk assessment is informed by environmental and social cues, as well as evacuation intentions and past disaster experience. This cross-sectional study measured perceived flood risk of 570 residents of three coastal North Carolina counties, compared their perception with actual risk determined by updated flood plain maps, and determined if either was associated with evacuation from Hurricane Isabel in 2003. Census blocks were stratified by flood zone and 30 census blocks were randomly selected from each flood zone. Seven interviews were conducted at random locations within selected blocks. Bivariate and multivariable analyses were conducted to produce crude and adjusted risk differences. Neither the designated flood zone of the parcel where the home was located nor the residents' perceived flood risk was associated with evacuation from Hurricane Isabel in the bivariate analysis. In the multivariable analysis, intention to evacuate and home type were important confounders of the association between actual risk and evacuation. The belief that one is at high risk of property damage or injury is important in evacuation decision making. However, in this study, while coastal residents' perceived risk of flooding was correlated with their actual flood risk, neither was associated with evacuation. These findings provide important opportunities for education and intervention by policymakers and authorities to improve hurricane evacuation rates and raise flood risk awareness.


Should people with exceptionally profound disabilities be given an equal chance of surviving a pandemic, even when their care might require evacuation? Should people with exceptional disabilities be given an equal chance of surviving a pandemic, even when their care might require a greater use of limited medical resources? How might an ethics of care be used to shape a policy regarding these patients?


Health professionals are involved in humanitarian assistance and development work in many regions of the world. They participate in primary health care, immunization campaigns, clinic- and hospital-based care, rehabilitation and feeding programs. In the course of this work, clinicians are frequently exposed to complex ethical issues. This paper examines how health workers experience ethics in the course of humanitarian assistance and development work. A qualitative study was conducted to consider this question. Five core themes emerged from the data, including: tension between respecting local customs and imposing values; obstacles to providing adequate care; differing understandings of health and illness; questions of identity for health workers; and issues of trust and distrust. Recommendations are made for organizational strategies that could help aid agencies support and equip their staff as they respond to ethical issues.


INTRODUCTION: Expatriate healthcare professionals frequently participate in international relief operations that are initiated in response to disasters due to natural hazards or humanitarian emergencies in low resource settings. This practice environment is significantly different from the healthcare delivery environment in the home countries of expatriate healthcare professionals. Human rights, public health, medicine, and ethics intersect in distinct ways as healthcare professionals provide care and services in communities affected by crisis. PURPOSE: The purpose of

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this study was to explore the moral experience of Canadian healthcare professionals during humanitarian relief work. METHODS: This is a qualitative study with 18 semi-structured individual interviews based on Interpretive Description methodology. There are two groups of participants: (1) 15 healthcare professionals (nine doctors, five nurses, and one midwife) with more than three months experience in humanitarian work; and (2) three individuals who have experience as human resource or field coordination officers for humanitarian, non-governmental organizations. Participants were recruited by contacting non-governmental organizations, advertisement at the global health interest group of a national medical society, word of mouth, and a snowball sampling approach in which participants identified healthcare professionals with experience practicing in humanitarian settings who might be interested in the research. RESULTS: Five central themes were identified during the analysis: (1) examination of motivations and expectations; (2) the relational nature of humanitarian work; (3) attending to steep power imbalances; (4) acknowledging and confronting the limits of what is possible in a particular setting; and (5) recognition of how organizational forms and structures shape everyday moral experience. DISCUSSION: Humanitarian relief work is a morally complex activity. Healthcare professionals who participate in humanitarian relief activities, or who are contemplating embarking on a humanitarian project, will benefit from carefully considering the moral dimensions of this work. Humanitarian organizations should address the moral experiences of healthcare professionals in staff recruitment, as they implement training prior to deployment, and in supporting healthcare professionals in the field.


OBJECTIVE: International nongovernmental organizations frequently provide emergency assistance in settings where armed conflict or natural disaster overwhelm the capacity of local and national agencies to respond to health and related needs of affected communities. Healthcare practice in humanitarian settings presents distinct clinical, logistical, and ethical challenges for clinicians and differs in important ways from clinical practice in the home countries of expatriate healthcare professionals. The aim of this research was to examine the moral experience of healthcare professionals who participate in humanitarian relief work. DESIGN: I conducted a qualitative research study using interpretive description methodology. PARTICIPANTS: Fifteen Canadian healthcare professionals and three human resource or field coordination officers for nongovernmental organizations were interviewed. RESULTS: In this article, I present findings related to expatriate healthcare professionals' experiences of resources and constraints for addressing ethical issues in humanitarian crises. Resources for ethics deliberation and reflection include the following: opportunities for discussion; accessing and understanding local perspectives; access to outside perspectives; attitudes, such as humility, open-mindedness, and reflexivity; and development of good moral "reflexes." Constraints for deliberation and reflection relate to three domains: individual considerations, contextual features of humanitarian relief work, and local team and project factors. CONCLUSION: These findings illuminate the complex nature of ethical reflection, deliberation, and decision-making in humanitarian healthcare practice. Healthcare professionals and relief organizations should seek to build upon resources for addressing ethical issues. When possible, they should minimize the impact of features that function as constraints.


Expatriate healthcare professionals frequently participate in international responses to natural disasters and humanitarian emergencies. This field of practice presents important clinical, logistical and ethical challenges for clinicians. This paper considers the ethics of health care practice in humanitarian contexts. It examines features that contribute to forming the moral landscape of humanitarian work, and discusses normative guidelines and approaches that are relevant for this work. These tools and frameworks provide important ethics resources for humanitarian settings. Finally, it elaborates a set of questions that can aid health care professionals as they analyse

INTRODUCTION: In order to prepare for pandemics, it is important to assess the likelihood that hospital personnel would report to work and to identify the issues that may affect this decision. OBJECTIVE: To survey hospital personnel regarding their attendance at work in the hypothetical event of avian influenza pandemic, and what factors might influence this decision. METHODS: A voluntary, confidential, institutional review board-approved survey was offered to a convenience sample of hospital workers regarding their willingness to report to work and what issues would be important in making this decision. Surveys not returned and individuals declining to participate were recorded. RESULTS: Of 187 surveys offered, 169 were completed (90% response rate): 34% were doctors, 33% were nurses, and 33% were clerical and other associates (other). The average age of the participants was 38 years, and 32% were males. Participants were asked: "In the event of an avian pandemic, and patients were being treated at this hospital, would you report to work as usual?". Of those who responded to the survey, 50% reported "yes", 42% reported "maybe", and 8% reported "no". Doctors were more likely than nurses or others to respond "yes" (73%), as were males (66%). For the "maybe" responders, the most important factor (83%) was: "How confident I am that the hospital can protect me". For 19% of the "maybe" responders, financial incentives would not make a difference for them to work, even up to triple pay. CONCLUSIONS: Personnel absenteeism during a pandemic due to fear of contracting an illness may result in a significant personnel shortage. Ensuring worker confidence in adequate personal protection may be more important than financial incentives.


Most disaster plans depend on using emergency physicians, nurses, emergency department support staff, and out-of-hospital personnel to maintain the health care system's front line during crises that involve personal risk to themselves or their families. Planners automatically assume that emergency health care workers will respond. However, we need to ask: Should they, and will they, work rather than flee? The answer involves basic moral and personal issues. This article identifies and examines the factors that influence health care workers' decisions in these situations. After reviewing physicians' response to past disasters and epidemics, we evaluate how much danger they actually faced. Next, we examine guidelines from medical professional organizations about physicians' duty to provide care despite personal risks, although we acknowledge that individuals will interpret and apply professional expectations and norms according to their own situation and values. The article goes on to articulate moral arguments for a duty to treat during disasters and social crises, as well as moral reasons that may limit or override such a duty. How fear influences behavior is examined, as are the institutional and social measures that can be taken to control fear and to encourage health professionals to provide treatment in crisis situations. Finally, the article emphasizes the importance of effective risk communication in enabling health care professionals and the public to make informed and defensible decisions during disasters. We conclude that the decision to stay or leave will ultimately depend on individuals' risk assessment and their value systems. Preparations for the next pandemic or disaster should include policies that encourage emergency physicians, who are inevitably among those at highest risk, to "stay and fight."


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Compassion is a language that is understood across cultures, religions, and nations. Being compassionate and empathetic is a basic responsibility of health care providers responding to disasters. Compassion and empathy cannot be operationalized unless providers show culturally competent, ethically right, and spiritually caring behavior. In addition to being accepting of cultures other than their own, providers must read literature and familiarize themselves with the predominant cultures of the affected population. Ethically right decision making is essentially an act of balancing the risks and benefits to the entire society. Spiritual care is an important dimension of total health, and therefore recognition and resolution of the spiritual needs of disaster victims is an essential role of health care providers. Disaster management is teamwork and therefore requires that health care providers draw on the expertise and support of other team members; coordinating efforts with local religious, social governmental organizations, and NGOs to deal with the intangible effects of the cultural and spiritual impact of a disaster and to prevent further demoralization of the affected community is imperative. Disasters occur, and the only thing that can ameliorate their devastating effects is to improve disaster preparedness and respond collectively and courageously to every catastrophic event.


TOPIC: The concept of "duty" is explored particularly as it applies to disaster nursing. PURPOSE: To identify the contributing factors to a nurse's sense of duty and the resulting consequences of such. Nursing implications of duty in a time of disaster are also discussed. SOURCES OF INFORMATION: Professional literature, electronic resources, and nursing textbooks were used. The analysis was done using Walker and Avant's (1995) process. CONCLUSION: The concept of duty has always been prevalent in nursing. As long as nurses have a sense of duty to their communities, nurse administrators will also have a moral obligation to protect their staff, especially in a time of disaster when nurses are compelled by a heightened sense of duty.


In a pandemic situation, resources in intensive care units may be stretched to the breaking point, and critical care triage may become necessary. In such a situation, I argue that a patient's combined vulnerability to illness and social disadvantage should be a justification for giving that patient some priority for critical care. In this article I present an example of a critical care triage protocol that recognizes the moral relevance of vulnerability to illness and social disadvantage, from the Canadian province of Newfoundland and Labrador.


The response to severe pandemic influenza will be managed by experts in public health and infectious disease and by government officials to whom the public will turn for information and direction. Nonetheless, there remain important ethical considerations that can shape what goals are given priority, how scarce resources are distributed, how the public is included, and how we treat the most vulnerable in our response to a pandemic. This article assumes that the secondary consequences of severe pandemic influenza could be greater than deaths and illness from influenza itself. Response plans, then, must consider threats to societal as well as medical infrastructures. While some have suggested that scarce medical countermeasures be allocated primarily to first responders and then to the sickest, we suggest that an ethical public health response should set priorities based on essential functions. An ethical response also will engage the public, will
The purpose of this article is to present an overview of the complexity of disaster preparedness strategies and to establish the basis and concepts of country-specific guidelines on disaster preparedness since emergencies situations will, fundamentally, differ from country to country and be on varying scales, and affect groups of people or communities differently. This article looks at the definition of disaster management and disaster preparedness, the role of health care professionals, emergency health care workers and stakeholders in health department and codes of ethics. The conclusion sets out some guidelines on what is expected of health care professionals in a disaster.

Because of the importance of including ethical considerations in planning efforts for pandemic influenza, in February 2005 the Centers for Disease Control and Prevention requested that the Ethics Subcommittee of the Advisory Committee to the Director develop guidance that would serve as a foundation for decision making in preparing for and responding to pandemic influenza. Specifically, the ethics subcommittee was asked to make recommendations regarding ethical considerations relevant to decision making about vaccine and antiviral drug distribution prioritization and development of interventions that would limit individual freedom and create social distancing. The ethics subcommittee identified a number of general ethical considerations including identification of clear goals for pandemic planning, responsibility to maximize preparedness, transparency and public engagement, sound science, commitment to the global community, balancing individual liberty and community interests, diversity in ethical decision making, and commitment to justice. These general ethical considerations are applied to the issues of vaccine and antiviral drug distribution and use of community mitigation interventions.

Preventing transmission of H1N1 and other infectious diseases can require individuals to change behaviors, but recommendations to change behavior can run counter to other powerful influences. For example, instructions to not shake hands or avoid certain public gatherings can run counter to substantial social pressures to shake hands or be in attendance. These behavioral conflicts are illustrated with an experience of the relative ineffectiveness of voluntary recommendations, which highlights the importance of considering these social pressures when determining what recommendations to make and how to make them. An analysis of how social pressures influence behaviors relevant to preventing disease transmission can aid public health officials in considering

Public health emergencies may result in mass casualties and a surge in demand for hospital-based care. Healthcare standards may need to be altered to respond to an imbalance between demands for care and resources. Clinical decisions that involve triage and scarce resource allocation may present unique ethical challenges. To address these challenges, the authors detailed tenets and procedures to guide triage and scarce resource allocation during public health emergencies. The authors propose health care organizations deploy a Triage and Scarce Resource Allocation Team to over-see and guide ethically challenging clinical decision-making during a crisis period. The authors' goal is to help healthcare organizations and clinicians balance public health responsibilities and their duty to individual patients during emergencies in as equitable and humane a manner as possible.


OBJECTIVE: The objective of this pilot study was to explore how Hurricane Katrina affected older adult disaster survivors. DESIGN AND SAMPLE: Participants for this descriptive exploratory pilot study were recruited from churches and senior centers on the Gulf Coast of Mississippi. Of the 224 participants, one hundred provided additional comments at the end of a forced-response questionnaire. MEASURES: Manifest content analysis was used to examine the participants' comments by identifying, coding, and categorizing their responses to the open-ended question. The codes were based on conditions and behaviors that might be exhibited by disaster victims. RESULTS: Themed categories were losses and needs, giving advice, justification for continuing to live in this disaster-prone region, deterrents and facilitators of home evacuation, spirituality and faith, manageability, bereavement, grief, anger, and natural debriefing. CONCLUSION: The strongest message of these survivors was the need to be heard by public health nurses, other public health officials preparing for disasters, and those in positions to render aid.


A disaster is a situation that overwhelms the local population's capacity to respond, thus necessitating a request for assistance from outside the impacted area. In these circumstances, needs usually outweigh resources. The objective of response is to do the greatest good for the greatest number of people (the utilitarian principle). As such, some unique ethical considerations will arise that are not seen in day-to-day practice. The adoption of medical ethics principles is important in such situations, but certain provisions must be accepted. In large-scale, complex disasters, it may be impossible to provide optimal care to each patient. This paper will discuss some of the challenges for healthcare personnel at "ground zero", how training in preventive ethics may help, and what principles can be applied when working in disaster-affected areas or when responding to disasters.


In an epidemic situation or large-scale disaster, medical and human resources may be stretched to the point of exhaustion. Appropriate planning must incorporate plans of action that minimize public health morbidity and mortality while maximizing the appropriate use of medical and human

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healthcare resources. While the current novel H1N1 influenza has spread throughout the world, the severity of this strain of influenza appears to be relatively less virulent and lethal compared to the 1918 influenza pandemic. However, the presence of this new influenza strain has reigned interest in pandemic planning. Amongst other necessary resources needed to combat pandemic influenza, a major medical resource concern is the limited number of mechanical ventilators that would be available to be used to treat ill patients. Recent reported cases of avian influenza suggest that mechanical ventilation will be required for the successful recovery of many individuals ill with this strain of virus. However, should the need for ventilators exceed the number of available machines, how will care providers make the difficult ethical decisions as to who should be placed or who should remain on these machines as more influenza patients arrive in need of care? This paper presents a decision-making model for clinicians that is based upon the bioethical principles of beneficence and justice. The model begins with the basic assumptions of triage and progresses into a useful algorithm based upon utilitarian principles. The model is intended to be used as a guide for clinicians in making decisions about the allocation of scarce resources in a just manner and to serve as an impetus for institutions to create or adapt plans to address resource allocation issues should the need arise.


This article examines the meaning of the killing of four patients with disabilities on the Life Care ward of Tenet's Memorial Medical Center in New Orleans in anticipation of hurricane Katrina. None were terminally ill. None were in pain. None knew their lives were about to end. None were evacuated. The victims had one thing in common: they all had chosen to be designated as Do Not Resuscitate (DNR) patients. All were killed with overdoses of medications that had not been prescribed for them. Dr. Daniel Nuss of the Louisiana State University School of Medicine and Dr. Floyd Burras, President of the Louisiana Medical Society defend the doctor's actions as involuntary euthanasia or mercy killing. Was this euthanasia, or homicide? At Memorial, the term DNR took on a new meaning-- Do Not Rescue. In this new Memorial model, patient autonomy to control and choose one's medical treatment, yields to the physician's unilateral power to arbitrarily decide who lives and who dies. The author concludes that doctors and hospitals must observe the rule of law, even in times of natural disaster.


Numerous grounds have been offered for the view that healthcare workers have a duty to treat, including expressed consent, implied consent, special training, reciprocity (also called the social contract view), and professional oaths and codes. Quite often, however, these grounds are simply asserted without being adequately defended or without the defenses being critically evaluated. This essay aims to help remedy that problem by providing a critical examination of the strengths and weaknesses of each of these five grounds for asserting that healthcare workers have a duty to treat, especially as that duty would arise in the context of an infectious disease pandemic. Ultimately, it argues that none of the defenses is currently sufficient to ground the kind of duty that would be needed in a pandemic. It concludes by sketching some practical recommendations in that regard.


Effectively controlling the spread of contagious illnesses has become a critical focus of disaster planning. It is likely that quarantine will be a key part of the overall public health strategy utilised during a pandemic, an act of bioterrorism or other emergencies involving contagious agents. While

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the United States lacks recent experience of large-scale quarantines, it has considerable accumulated experience of large-scale evacuations. Risk perception, life circumstance, work-related issues, and the opinions of influential family, friends and credible public spokespersons all play a role in determining compliance with an evacuation order. Although the comparison is not reported elsewhere to our knowledge, this review of the principal factors affecting compliance with evacuations demonstrates many similarities with those likely to occur during a quarantine. Accurate identification and understanding of barriers to compliance allows for improved planning to protect the public more effectively.


Recent epidemics and pandemics have highlighted a number of ethical concerns about the response to the increasing threat of emerging infectious diseases. Some of these ethical concerns are very fundamental. They include why a pandemic was declared, how much clinical information can be collected for public health without threatening patient confidentiality and how to ensure fairness in the distribution of resources. We discuss these issues and suggest approaches to resolve these dilemmas as we anticipate the next pandemic.


BACKGROUND: When residents are confronted with disaster, it is often difficult for them to realize the danger and take protective action. In 2004, an evacuation advisory alert was issued on the approach of the season's 23rd typhoon in Japan, but only 5.1% of the residents actually evacuated. Therefore, we felt it necessary to elucidate the awareness and behaviours of residents during the period. AIMS: To clarify the awareness, behaviour and related factors of residents who were issued an evacuation advisory alert for the 2004 season's 23rd typhoon. METHODS: One questionnaire per one household was distributed to 2818 households in the area where the evacuation advisory alert was issued. FINDINGS: A total of 481 responses were returned (a response rate of 17.1%). Residents who evacuated made their decision because they felt the situation was dangerous; they recognized the extent of the danger. There was a pattern of agreement that it had been wise to do so. For those who didn't evacuate, many cited as the reason for their behaviour that their houses didn't flood. Non-evacuees also felt it was all right to stay at home and valued the merits of staying home. Related factors were housing structures, routine disaster-preparedness, a sense of personal danger and the impact of mass media news. CONCLUSIONS: Although the participation rate was only 17.1%, this study was successful in uncovering aspects of awareness and behaviour of residents in the designated area. It also provided insight into what is needed for future disaster-preparedness, equipment and education.


The 2009 influenza A/H1N1 pandemic seems to be only moderately severe. In the future, a pandemic influenza with high lethality, such as the Spanish influenza in 1918-1919 or even worse, may emerge. In this kind of scenario, lethality rates ranging roughly from 2% to 30% have been proposed. Legal and ethical issues should be discussed before the incident. This article aims to highlight the legal, ethical and professional aspects that might be relevant to anaesthesiologists in...
the case of a high-lethality infectious disease such as a severe pandemic influenza. The epidemiology, the role of anaesthesiologists and possible threats to the profession and colleagueship within medical specialties relevant to anaesthesiologists are reviewed. During historical plague epidemics, some doctors have behaved like 'deserters'. However, during the Spanish influenza, physicians remained at their jobs, although many perished. In surveys, more than half of the health-care workers have reported their willingness to work in the case of severe pandemics. Physicians have the same human rights as all citizens: they have to be effectively protected against infectious disease. However, they have a duty to treat. Fair and responsible colleagueship among the diverse medical specialties should be promoted. Until disaster threatens humanity, volunteering to work during a pandemic might be the best way to ensure that physicians and other health-care workers stay at their workplace. Broad discussion in society is needed.


The National Association of Social Workers (NASW) Code of Ethics identifies numerous ethical standards that describe the responsibilities for the social work profession to the broader society. Mentioned among these ethical standards is the responsibility for social workers to provide appropriate professional services in response to public emergencies. However, few empirical studies describing effective interventions for public emergencies are available. This article reviews empirical evidence that can be used to guide social work practice in response to public emergencies, the methodological issues that present challenges for evidence-based research during public emergencies, and provides suggestions for the delivery of professional social work services in response to public emergencies considering the limited empirical evidence.


On 15 November 2007 Cyclone Sidr, a category 4 storm, struck the southwestern coast of Bangladesh. Despite early cyclone warnings and evacuation orders for coastal residents, thousands of individuals stayed in their homes. This study examines dissemination of the warning, assesses the warning responses, and explores the reasons why many residents did not evacuate. Field data collected from 257 Sidr survivors in four severely affected coastal districts revealed that more than three-fourths of all respondents were aware of the cyclone warnings and evacuation orders. Despite the sincere efforts of the Bangladesh government, however, lapses in cyclone warnings and evacuation procedures occurred. Field data also revealed several reasons why evacuation orders were not followed. The reasons fell into three broad groups: those involving shelter characteristics; the attributes of the warning message itself; and the respondents' characteristics. Based on our findings, we recommend improved cyclone warnings and utilization of public shelters for similar events in the future.


When an infectious pandemic occurs in the United States, emergency care providers (ECPs) will be on the frontlines caring for infected, potentially infected, and non-infected patients. Logistically, the current emergency care system is not ready for a pandemic, but are the providers ethically ready? Some of the most difficult and challenging issues that will be raised during a pandemic will be ethical in nature. An ECP likely will be confronted with ethical values and value conflicts underlying restriction of liberty, duty to care, and resource allocation. This report summarizes the ethical concerns and challenges that ECPs face during an infectious pandemic, and raises ethical questions that may arise related to the role of an ECP as a healthcare provider and stakeholder.
General concepts and about medical disasters, public health and triage are outlined. Ethical values at stake are summarized. A special attention is given to conflicts between protection of individual interests (typical of clinical ethics) and collective interests (typical of public health and triage). Hippocratic ethics is compared to utilitarian ethics and to perspectives that emphasize the principle of justice. Three attitudes are suggested: protection of human dignity, precaution, solidarity. A personalistic perspective is suggested to deepen solidarity as a pillar both of clinical and public health ethics.


General concepts about medical disasters, public health and triage are outlined. Triage is described in the context of public health emergencies and disaster settings, and the main ethical values at stake in triage are discussed. Possible conflicts between competing values are outlined. Special attention is given to possible conflicts between the protection of individual interests (typical of clinical ethics), and the pursuit of collective interests (typical of public health and triage). Hippocratic ethics is compared to utilitarian ethics and to perspectives that emphasize the principle of justice. Three ethical attitudes are suggested that may contribute to a resolution of competing values: protection of human dignity, precaution and, especially, solidarity. Personalism promotes the collective good by safeguarding and giving value to the well-being of each individual. A personalistic perspective is suggested as a way to deepen the concept of solidarity as a pillar both of clinical and public health ethics.


The bases of humanitarian assistance, beyond a legal norm—which appears to be essential given the inalienable obligations that result for all participating bodies—are influenced by philosophical and political conceptualizations framed in an ethics of justice. Actors in the humanitarian field who adhere to the Rawlsian social contract model their actions based on a philosophy that assistance is a noble and desirable option that remains in the hands of those who offer aid, and who can freely choose to offer such assistance. Peter Singer and Thomas Pogge propose nuances to the understanding of the duty of assistance. Not assisting would be bad, basically tantamount to killing. Assistance is no longer a caring act deserving of praise, but rather a moral obligation. The financial imperatives of associations, the growing complexity of activities and the development of an important element of communication lead to a professionalization of humanitarian medicine. A modern vision of humanitarian assistance requires an understanding of justice and solidarity and global outreach. We believe that ethics need to be embedded firmly in humanitarian actions that have clear political implications.


The response of medical students, young physicians, and other health professionals to the February 2010 earthquake and tsunami in Chile provides important lessons about health care delivery during disasters and about the development of professionalism. Tertiary and secondary care of victims of these disasters was possible because local and national resources were available and field hospitals provided by Chile's armed forces and foreign countries replaced damaged hospitals. However, primary care of persons living on the outskirts of towns and in small villages and coves that were destroyed and isolated by the disaster required the involvement of volunteer groups that were largely composed of students and other young members of the health professions, all of whom...
were motivated by solidarity, compassion, and social commitment. This experience, similar to previous catastrophes in Chile and elsewhere, reinforces that medical and other health professional schools must instill in graduates an understanding that the privileges of being a health professional come with responsibilities to society. Beyond providing high-quality scientific and technological education, curricula in these schools should include training that enables graduates to meaningfully contribute in the setting of unexpected disasters and that nurtures a sense of responsibility to do so.


Those who intervene in crises must take care to ensure that assistance does not undermine the processes through which social cohesion is generated or restored. From a neo-Durkheimian analytical perspective, feeding creates social loyalties as well as saves lives. Humanitarian agencies provide practical assistance to livelihoods, but they need also to create space for the ritual agency on which social cohesion depends. Attention to the rituals of food distribution helps humanitarian actors to address a potentially damaging dissociation between social and material facts. A post-war food security project in Sierra Leone is used to illustrate the point. The lessons of this intervention have implications for the organisation of humanitarian assistance at all levels, both international and local. The paper argues that establishing space for ritualisation within humanitarian programmes is an obligation for those who wish to do no harm.


On August 29, 2005, Hurricane Katrina struck the Gulf Coast and resulted in widespread devastation. The collapse of social services including medical care was followed by chaos and resulted in many deaths. In this aftermath, a physician and two nurses were charged with homicide in the deaths of four patients who were under their care at a New Orleans Hospital. The circumstances surrounding these deaths are unclear, and causation far from proven. But in any disaster setting, if healthcare providers contribute to a patient's death, there are a limited number of possible scenarios. The actions may be done with criminal intent, may be the result of medical errors, may involve the principle of double effect, or finally, and most problematic, the deaths may involve euthanasia (either voluntary or involuntary). This review discusses each possibility and the ethical and legal basis for immunity in these situations. Because the circumstances were so unique, no comparison to routine practice can be made, but an interesting comparison to battlefield ethics can be made. Finally the rationale for immunity is explored, including a utilitarian approach, the good Samaritan laws, and various existing immunity statutes.


The Federal Crisis Counseling Program (CCP) funds states' delivery of mental health services after disasters. These services are provided by social workers, other mental health professionals, and paraprofessionals from the local community. The present study examined whether CCP grant recipients that reported more tailoring of their interventions to the needs of diverse community segments achieved greater community penetration. The study reviewed archival records from 36 crisis counseling projects ending between 1996 and 2001. Numbers of clients and client ethnicity were determined through service logs. Tailoring of services was determined by content coding of projects' reports. Community demographics were determined from census data. Fifty-six percent of the projects reported using three or more tailoring strategies, suggesting a "precompetence" or greater stage of cultural competence. The proportion of members of racial or ethnic minority groups among program clients closely matched the proportion in grantees' communities. Projects that reported more types of tailored activities reached more clients and served more members.
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of minority groups. These findings confirm that adapting crisis counseling services to diverse local needs is associated with greater community penetration of mental health services.


OBJECTIVES: To investigate the evacuation needs and beliefs of older adults in 2 counties in Georgia; to identify health risk factors; and to provide public health and emergency management officials with planning information. DESIGN: A descriptive survey using The Older Adult Disaster Evacuation Assessment. SAMPLE: 139 lower socioeconomic participants at congregate meal sites. RESULTS: Hurricane Katrina significantly influenced decisions to evacuate in disasters. Over 70% said they would definitely evacuate in the future and nearly 16% would probably evacuate, yet over 13% reported "maybe" or "no." Multiple logistic regressions suggest that those who do not trust their TV and county officials' information would have only 1/4 the odds of definitely evacuating. Those who say they would not follow their county officials' advice have only 1/3 the odds of definitely evacuating. Primary health problems were decreased mobility (40.1%), hypertension (70.5%), and arthritis (53.2%). Forty-six percent would need transportation; approximately 40% lived alone; and about 40% had fair or poor health. CONCLUSIONS: Trust and belief in county officials and the media were the best predictors of willingness to evacuate. Participants in this study would need assistance with transportation, preparation, and support for serious health problems in order to evacuate. Further study is needed with a larger, more representative sample.


CONTEXT: Planning for a severe influenza pandemic entails facing many substantive public health challenges, especially in the area of the distribution of insufficient supplies of materials and personnel. It is anticipated that rationing of health care resources will be required, thus demanding that choices be made about which individuals should receive potentially life-saving care when not all who can be saved can be served. EVIDENCE ACQUISITION: Most proposed triage and allocation plans have used medical inclusion and exclusion criteria to reduce this gap, but there will still be many more patients than resources. Thus, the potential to arbitrarily exclude groups of people on non-medical grounds in order to reduce relative scarcity could offer an attractive option. Can societies make reasoned anticipatory decisions to keep certain people from receiving influenza treatment in order to maximize the availability of care for other, more favored groups? RESULTS: In this paper, we argue that taking the fundamental moral equality of people seriously requires the inclusion of vulnerable, socially marginalized groups (such as illegal immigrants and incarcerated prisoners) in planning for a pandemic. While there may be a majoritarian justification for a priori discrimination against some groups of people on non-medical grounds, there are no morally defensible reasons to do so and many reasons not to engage in such behavior. CONCLUSIONS: Pandemic planners should resist attempts to institute either unsanctioned or authorized discrimination in resource allocation. Because of their unique position in society, their ethical code and their essential role in confronting a pandemic, physicians can (and should) defend egalitarianism in the allocation of health care resources in such a public health crisis and advocate and act against such exclusion were it to occur.


INTRODUCTION: There has been much federal and local health planning for an influenza pandemic in the United States, but little is known about the ability of the clinical community to deal quickly and effectively with a potentially overwhelming surge of pandemic influenza patients. PROBLEM: The attitudes and expectations of emergency physicians, emergency nurses, hospital nursing supervisors, hospital administrators, and infection control personnel concerning clinical care in a pandemic were assessed. METHODS: Key informant structured interviews of 46 respondents from 34 randomly selected emergency receiving hospitals in Los Angeles County were conducted using an Institutional Review Board-approved protocol. The interview asked about supplies/resources, triage, quality of care, and decision-making. At the conclusion of each interview, the informant was asked to provide the contact information for at least two others within their respective professional group. Interviews were transcribed and coded for key themes using qualitative analytical software. RESULTS: There was little salience that an influx of variably ill patients with influenza would force stratified healthcare decision-making. There also was a general lack of preparation to address the ethics and practices of triaging patients in the clinical setting of a pandemic. CONCLUSIONS: Guidelines must be developed in concert with public health, medical society, and legislative authorities to help clinicians define, adopt, and communicate to the public those practice standards that will be followed in a mass population, infectious disease emergency.


Most scarcities that underpin health disparities within and among countries are not natural; rather, they result from policy choices and the operation of social institutions. Using examples from the United States of America: the Chicago heat wave and hurricane Katrina, this paper develops "denaturalizing scarcity" as a strategy for enquiry to inform public-health ethics in an interconnected world. It first describes some of the resource scarcities that are of greatest concern from a public-health perspective, and then outlines two (not mutually exclusive) lines of ethical reasoning that demonstrate their importance. One of these involves the multiple relationships that link rich and poor across national borders in today's interconnected world. The paper then briefly describes ways in which globalization and the associated institutions are linked to health-threatening scarcities. The paper concludes that denaturalizing scarcity represents a valuable alternative to mainstream health ethics, directing our attention instead to why some settings are "resource poor" and others are not.


STUDY OBJECTIVE: Over large expanses, the risk for hospital damage from an earthquake attenuates as the distance from the epicenter increases, which may not be true within the immediate disaster zone (near field), however. The following study examines the impact of epicenter distance and ground motion on hospital evacuation and closure for those structures near the epicenter of the 1994 Northridge Earthquake and the implications for patient evacuation. METHODS: This is a retrospective case-control study of all hospitals reporting off-site evacuations or permanent closure because of damage from the January 17, 1994, earthquake in Northridge, CA. Control hospitals were randomly identified from those facilities that did not evacuate patients. Distances from the epicenter and peak ground accelerations were calculated for each hospital from Trinet ShakeMap data and compared. RESULTS: Eight hospitals evacuated patients (study group); 4 of these hospitals were condemned. These were compared to 8 hospitals that did not evacuate patients (control group). The median epicenter-to-hospital distance for evacuated facilities was 8.1
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Pandemics and disasters.


Pandemics and acute emergencies raise pressing medical, ethical and organisational challenges.

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These include global governance, priority setting, triaging of patients, allocation of scarce resources and restricting individual liberty in the interests of public health. We will focus particularly on an issue of direct relevance to all respiratory team members, i.e. what is the duty of the healthcare worker to continue working in the face of personal risk, and draw lessons from guidelines, ethical considerations, past pandemics and evolving experience with H1N1 swine influenza.


Objective: This article offers an expanded perspective on evacuation decision making during severe weather. In particular, this work focuses on uncovering determinants of individual evacuation decisions. Methods: We draw on a survey conducted in 2005 of residents in the eight-county Houston metropolitan area after Hurricane Rita made landfall on September 24, 2005. Results: We find that evacuation decisions are influenced by a heterogeneous set of parameters, including perceived risk from wind, influence of media and neighbors, and awareness of evacuation zone, that are often at variance with one of the primary measures of risk used by public officials to order or recommend an evacuation (i.e., storm surge). We further find that perceived risk and its influence on evacuation behavior is a local phenomenon more readily communicated by and among individuals who share the same geography, as is the case with residents living inside and outside official risk areas. Conclusions: Who evacuates and why is partially dependent on where one lives because perceptions of risk are not uniformly shared across the area threatened by an approaching hurricane and the same sources and content of information do not have the same effect on evacuation behavior. Hence, efforts to persuade residential populations about risk and when, where, and how to evacuate or shelter in place should originate in the neighborhood rather than emanating from blanket statements from the media or public officials. Our findings also raise important policy questions (included in the discussion section) that require further study and consideration by those responsible with organizing and implementing evacuation plans.


Models of agency--powerful implicit assumptions about what constitutes normatively "good" action-shaped how observers and survivors made meaning after Hurricane Katrina. In Study 1, we analyzed how 461 observers perceived survivors who evacuated (leavers) or stayed (stayers) in New Orleans. Observers described leavers positively (as agentic, independent, and in control) and stayers negatively (as passive and lacking agency). Observers' perceptions reflected the disjoint model of agency, which is prevalent in middle-class White contexts and defines "good" actions as those that emanate from within the individual and proactively influence the environment. In Study 2, we examined interviews with 79 survivors and found that leavers and stayers relied on divergent models of agency. Leavers emphasized independence, choice, and control, whereas stayers emphasized interdependence, strength, and faith. Although both leavers and stayers exercised agency, observers failed to recognize stayers' agency and derogated them because observers assumed that being independent and in control was the only way to be agentic.


We evaluate effects of low socioeconomic position (SEP) and social networks among Black Hurricane Katrina victims on access to and processing of evacuation orders, and abilities to evacuate before the storm hit. We also explore whether SEP, moderating conditions, and communication outcomes affected risk perceptions of the storm's severity and compliance with evacuation orders. We conducted stepwise logistic regression analyses using survey data collected in September 2005 among Black respondents in shelters throughout Houston, TX. Having few social networks, being unemployed, and being of younger age were significantly associated with having heard evacuation orders and whether victims' perceived having heard clear orders. This
study provides implications for targeted public health emergency campaigns and future research to understand the effects of sociodemographic influences on communication inequalities and public health preparedness.


A pandemic of highly pathogenic influenza would threaten the lives of hundreds of thousands in the United States and confront governments and organizations, with ethical issues having wide-ranging implications. The Department of Health and Human Services and all states have published pandemic influenza plans. We analyzed the federal and state plans, available on the Internet, for evidence of ethical guidance as judged by the presence of ethical terms. The most striking finding was an absence of ethical language. Although some states acknowledged the need for ethical decisionmaking, very few prescribed how it should happen. If faced by a pandemic in the near future, we stand the risk of making many unjust and regrettable decisions.


Public health emergencies, such as hurricanes and the constant threat of an influenza pandemic, present public health responders with many ethical issues and little time to think them through. We interviewed 13 responders in the Epidemiology Section of the North Carolina Division of Public Health to learn how they have identified and addressed ethical issues in public health emergencies affecting the state and to identify potential means of improving those processes for North Carolina and other states. The Epidemiology Section staff demonstrated an awareness of several ethical issues in public health emergencies and an ability to identify and address issues through group interactions. However, few study participants in the section had received any training in public health ethics. Perhaps for this reason, the range of ethical issues they identified excluded several mentioned in the Public Health Code of Ethics. Moreover, their ethical decision making could be enhanced by a more detailed understanding of the ethical issues they named. We recommend seven practical steps that the Epidemiology Section can take to improve their ability to identify and address ethical issues in a public health emergency. The recommendations are likely relevant to many state, city, and county public health departments throughout the United States.


We assessed the progress since 2005 of state plans for pandemic influenza and found that 7 states had recommended steps to further clarify ethical processes or decisions; 6 states had made some progress but almost exclusively in hospital preparedness. Having a high-level public health leader, such as a health department director, committed to ethics was the key determinant of progress. Some state health departments may be destined to gain an appreciation for ethics through ethical mishaps.


PURPOSE: To provide a revised definition, process and purpose of triage to maximise the number of patients receiving intensive care during a crisis. METHODS: Based on the ethical principle of virtue ethics and the underlying goal of providing individual patients with treatment according to their best interests, the methodology of triage is reassessed and revised. RESULTS: The decision making processes regarding treatment decisions during a pandemic are redefined and new methods of intensive care provision recommended as well as recommending the use of a 'ranking' system for patients excluded from intensive care, defining the role of non-intensive care specialists, and applying two types of triage as 'organisational triage' and 'treatment triage' based on the
demand for intensive care. CONCLUSION: Using a different underlying ethical basis upon which to plan for a pandemic crisis could maximise the number of patients receiving intensive care based on individual patients’ best interests.


Because an influenza pandemic would create the most serious hardships for those who already face most serious hardships, countries should take special measures to mitigate the effect of a pandemic on existing social inequalities. Unfortunately, there is little evidence that anybody is thinking about that.


Cultural, ethical, and spiritual implications of disaster depend on various factors. The impact of a disaster on a particular culture depends on the people in that culture and the strength and resilience of the culture. Disasters may slow cultural development; however, typically the customs, beliefs, and value systems remain the same even if the outward expressions of culture change. Critical to survivors is the implication of aid that is culturally sensitive. Ethical questions and dilemmas associated with disasters and their management are profound. Adhering to ethical principles does not solve all of the issues related to disaster management, but awareness of their utility is important. People affected by a disaster may not be capable of responding to human rights violations, so it is the first responders who must be cognizant of their responsibility to protect the victims’ dignity and rights. Ethical treatment of survivors entails a crucial blend of knowledge about ethnic culture, religious beliefs, and human rights. A strong awareness of ethical principles is merely a beginning step to well-informed decision making in disaster situations. The literature also suggests that during a crisis, spirituality helps victims to cope. Important to any catastrophic event is the understanding that every disaster creates unique circumstances that require relief responses tailored to the specific situation.


Pandemic plans are increasingly attending to groups experiencing health disparities and other social vulnerabilities. Although some pandemic guidance is silent on the issue, guidance that attends to socially vulnerable groups ranges widely, some procedural (often calling for public engagement), and some substantive. Public engagement objectives vary from merely educational to seeking reflective input into the ethical commitments that should guide pandemic planning and response. Some plans that concern rationing during a severe pandemic recommend ways to protect socially vulnerable groups without prioritizing access to scarce resources based on social vulnerability per se. The Minnesota Pandemic Ethics Project (MPEP), a public engagement project on rationing scarce health resources during a severe influenza pandemic, agrees and recommends an integrated set of ways to attend to the needs of socially vulnerable people and avoid exacerbation of health disparities during a severe influenza pandemic. Among other things, MPEP recommends: 1. Engaging socially vulnerable populations to clarify unique needs and effective strategies; 2. Engaging socially vulnerable populations to elicit ethical values and perspectives on rationing; 3. Rejecting rationing based on race, socioeconomic class, citizenship, quality of life, length of life-extension and first-come, first-served; 4. Prioritizing those in the general population for access to resources based on combinations of risk (of death or severe complications from influenza, exposure to influenza, transmitting influenza to vulnerable groups) and the likelihood of responding well to the resource in question. 5. Protecting critical infrastructures on which vulnerable populations and the general public rely; 6. Identifying and removing access barriers.
during pandemic planning and response; and 7. Collecting and promptly analyzing data during the pandemic to identify groups at disproportionate risk of influenza-related mortality and serious morbidity and to optimize the distribution of resources.


In the aftermath of international emergencies caused by natural disasters or armed conflicts, strong needs exist for psychosocial support on a large scale. Psychologists have developed and applied frameworks and tools that have helped to alleviate suffering and promote well-being in emergency settings. Unfortunately, psychological tools and approaches are sometimes used in ways that cause unintended harm. In a spirit of prevention and wanting to support critical self-reflection, the author outlines key issues and widespread violations of the do no harm imperative in emergency contexts. Prominent issues include contextual insensitivity to issues such as security, humanitarian coordination, and the inappropriate use of various methods; the use of an individualistic orientation that does not fit the context and culture; an excessive focus on deficits and victimhood that can undermine empowerment and resilience; the use of unsustainable, short-term approaches that breed dependency, create poorly trained psychosocial workers, and lack appropriate emphasis on prevention; and the imposition of outsider approaches. These and related problems can be avoided by the use of critical self-reflection, greater specificity in ethical guidance, a stronger evidence base for intervention, and improved methods of preparing international humanitarian psychologists.


This paper attempts to provide both a visual and written commentary of the post-Tsunami health and community-driven recovery strategies within conflict affected zones in Northern Sri Lanka. It explores examples of the impact of unsolicited, culturally inappropriate and conflict insensitive interventions initiated by both local and international teams, and how displaced communities attempted to mitigate the effects of inequitable aid practices. Though challenging, engaging communities early in the recovery process becomes necessary in order to reduce vulnerability and prevent 'aid-mediated' communal tensions. Hence the dictum "hands in relief, eyes on 'development'" applies for post-disaster interventions.


Nurses and other healthcare providers (HCPs) have a long history of providing care during extreme emergencies, disasters, or mass casualty incidents (MCIs). Surveys have been conducted in U.S. metropolitan areas to determine the ability and willingness of HCP to respond to MCIs. Various barriers were identified in those studies. The purpose of this study was to examine the perceptions and attitudes of HCPs in other countries and cultures to barriers they may have in their ability or willingness to respond during an MCI. The study participants were 42 nurses completing their master's degree, representing 26 different countries and territories, and they were assigned to one of eight focus groups based on the location of their country of origin. The findings revealed several themes, the first being that in some countries there were no perceived barriers to either ability or willingness to respond to an MCI. In other countries, the perceived barriers to ability were lack of transportation, staff shortages, equipment shortages, personal illness, and lack of infant care, whereas the perceived barriers to willingness were dimensions of fear and employment status. Cultural differences played a significant role in the ability and willingness of the HCPs to respond to an MCI.


The three primary ethical challenges in preparing for public health emergencies - addressing questions of rationing, restrictions and responsibilities - all entail confronting uncertainty. But the
third, considering whether people and institutions will live up to their responsibilities in a crisis, is perhaps the hardest to predict and therefore plan for. The quintessential example of a responsibility during a public health emergency is that of health care professionals' obligation to continue caring for patients during epidemics. Historically, this 'duty to treat' has sometimes gone unrecognized or ignored, but it has also famously been adhered to, including during the recent SARS epidemic. And non-crisis examples of health professionals working in the face of personal risk are very common. The duty to treat should be circumscribed by several considerations, including the levels or risk and benefit at issue, the degree of public reliance on health professional action, and the nature of the individual health professional's acceptance of greater than usual risk. Examining the professional duty to treat and the legitimate questions it raises can provide insight into other actors' responsibilities. Public health ethics as well as professional ethics can help frame answers to some key questions: How strong are ethical responsibilities during crises? To whom do they apply? Should they be more explicit - and hence more circumscribed - or less explicit and hence largely aspirational? And how can public health policies encourage responsible actions?


Responses to public health emergencies can entail difficult decisions about restricting individual liberties to prevent the spread of disease. The quintessential example is quarantine. While isolating sick patients tends not to provoke much concern, quarantine of healthy people who only might be infected often is controversial. In fact, as the experience with severe acute respiratory syndrome (SARS) shows, the vast majority of those placed under quarantine typically don't become ill. Efforts to enforce involuntary quarantine through military or police powers also can backfire, stoking both panic and disease spread. Yet quarantine is part of a limited arsenal of options when effective treatment or prophylaxis is not available, and some evidence suggests it can be effective, especially when it is voluntary, home-based and accompanied by extensive outreach, communication and education efforts. Even assuming that quarantine is medically effective, however, it still must be ethically justified because it creates harms for many of those affected. Moreover, ethical principles of reciprocity, transparency, non-discrimination and accountability should guide any implementation of quarantine.


OBJECTIVE: The global threat of an influenza pandemic continues to grow and thus universities have begun emergency preparedness planning. This study examined stakeholder's knowledge, risk-perception, and willingness to volunteer. DESIGN AND SAMPLE: The design of this study is a cross-sectional survey. Questionnaires were sent to 1,512 nursing students and were returned by 484, yielding a response rate of 32% for this subgroup. Nursing students may be a much-needed human resource in the event of an influenza pandemic. MEASURES: The measurement tool was a Web-based questionnaire regarding pandemic influenza designed by a subgroup of researchers on the Public Health Response Committee. RESULTS: Most nursing students (67.9%) said they were likely to volunteer in the event of a pandemic if they were able to do so. An even higher number (77.4%) said they would volunteer if provided protective garments. Overall, 70.7% of students supported the proposition that nursing students have a professional obligation to volunteer during a pandemic. Nursing students indicated that they have had a wealth of volunteer experience in the past and they would apply this service ethic to a pandemic situation. CONCLUSIONS: Emergency preparedness competencies should be integrated into existing nursing curricula and other health science programs. University administrations need to engage in planning to create protocol for recruitment, practice, and protection of volunteers.

Key Questions

1. Triage/Allocation Questions
   a. Is stockpiling reserves or keeping some resources “in the bank” ethically permissible/appropriate?
   b. Is there a difference between withdrawing and withholding critical care treatment? Are there groups that should be exempted from a commonly held belief on this topic? What is the appropriate response to groups that disagree?
   c. Is it ethically permissible to withdraw critical care treatment to reallocate to someone else based on higher likelihood of benefit? (e.g. alternate triage prioritization frameworks / reverse triage)
   d. Should some specific groups, e.g. health care workers, and/or first responders/mass casualty workers, receive enhanced access to scarce critical care resources when crisis standards of care are in effect? What is the basis of that privilege?
   e. What are the ethical implications of decision-making based on scoring systems with limited evidence base vs. decision-making based on clinical judgment?
   f. Should those in need of critical care support who are not allocated those resources be procedurally made DNR and transitioned to palliative care only?
   g. What is the appropriate balance of resource allocation for disaster related critical care needs vs baseline critical care needs? How does this vary based on the baseline capabilities in the affected area?
   h. Should inclusion/exclusion criteria vary based on source of critical care need (baseline vs disaster-related)?
   i. Is it ethically permissible to exclude otherwise ‘qualified’ patients from critical care treatment given an expected high level of ongoing resource consumption?
   j. What are the ethical benefits and liabilities of using exclusion criteria? How should exclusion criteria be selected?
   k. Are there certain therapies, procedures or diagnostic tests that should be limited or summarily excluded during crisis standards of care? CPR, ECMO CRRT? What are the triggers to institute those exclusions?
   l. Under crisis standards of care should active life-ending procedures be allowed?

2. Documentation/Consent -
   a. What, if any, changes may be made in the context of disasters to standard documentation requirements? E.g. consent, triage decisions
   b. As we shift towards crisis standards of care, are there ethically appropriate changes to usual consent processes that need to be addressed?

3. Ethical Responsibilities to Providers -
   a. What are the ethical/moral obligations/considerations for systems and supervisors in providing support for the management of moral distress related to response fatigue, etc?
   b. How do we respond to those providers who refuse or are unable to accept a shift to crisis standards of care? What is a valid claim of conscience in this context?
   c. What are the obligations of health care systems to assist providers/workers in balancing conflicting professional vs personal obligations and duties?
   d. What is the appropriate balance between provider autonomy and needs of the patient? (mandatory vaccination)
4. Research –
   a. What adjustments to usual research/QI review and consent processes need to be instituted in the context of conducting research during disasters? (PHERB?) (Emergency research)
   b. What are the parameters that should guide suspension of research protocols during disaster responses?
   c. What are the appropriate constraints on types of research that may be performed during disasters?
5. International Concerns –
   a. Is it ethically appropriate to initiate care or therapies in a disaster response that cannot be maintained at the conclusion of the response?
   b. What are the ethical obligations of providers who are responding to a disaster in another country?
   c. How do we demonstrate culturally appropriate respect for the dead within the disaster context? What obligations do we have to honor religious and cultural rights around death in disasters?
6. Crisis Standards of Care – Balancing Ethical Claims
   a. Do those transferred to palliative care have ethical claims on the systems and providers? What are they? What are the limits to those claims?
   b. Do the loved ones of patients and the deceased have ethical claims on the systems and providers? What are they? What are the limits to those claims?
   c. How are the claims of disaster victims and a hospital's usual patient population balanced?