Disaster Ethics and Healthcare Personnel

Disaster Ethics, Health care and Nursing: A Model Case Study to Facilitate the Decision Making Process

Abstract

The impact of Hurricane Katrina on the Gulf Coast signified the arrival of the most catastrophic natural disaster in United States history. Despite years of dire warnings, the absence of hurricane evacuation policies and disaster contingency plans highlighted staggering ineptitudes at all levels of government and all levels of health care organizations. Thousands of health care personnel and, in some instances, their families were stranded in New Orleans hospitals awaiting evacuation in rapidly deteriorating conditions. Many of these health care workers are not expected to return to New Orleans. Some of these decisions are infrastructure driven. However, many are due to the psychological traumas experienced as a result of the ethically perpetuated conflicts they were forced to contend with, in some instances. Familiarity with and utilization of a framework for ethical decision-making may facilitate health care professionals in maneuvering through disaster-instigated ethical dilemmas.

Keywords: Disaster; Ethics; Healthcare; Hurricane Katrina; New Orleans

Yolanda M. Powell-Young, PhD, MSN, RN, BC, CPN, CNS
Assistant Professor, Dillard University – Division of Nursing
1555 Poydras Street, Suite 1200 - New Orleans, Louisiana 70130
Phone: 504-722-2628
Fax: 504-816-4295
Email: youngdty@aol.com

Janelle R. Baker, PhD, MSN, APRN,BC
Associate Professor of Nursing, Florida A & M University School of Nursing
Ware-Rhaney Building - Tallahassee, Florida 32307
Phone: 850-212-2800
Fax: 850-212-2800
Email: janlegnurs@aol.com

Jacqueline G. Hogan, MSN, APRN, CNS
Administrative Supervisor, Touro Infirmary
1400 Foucher Street - New Orleans, Louisiana 70115
Phone: 504-491-8541
Fax: 504-491-8575
Email: hoganj@touro.com

Introduction

The annihilation of the Gulf Coast by Hurricane Katrina thrust the inadequacies of disaster and evacuation policies and practices at all levels of organizational and political government into the national spotlight. Images of stranded, desperate, dying and dead citizens initiated a fulcrum of viable questions and concerns. Perceptions of despair and imminent doom perpetuated the rationalization of physician-propagated euthanasia of the infirm, abandonment of the elderly and medical genocide of the hospitalized by those entrusted with maintaining the sanctity of human life. These actions instigated a cacophony of outrage, indignation, and criticisms. In an effort to expedite the façade of orderliness and normalcy in a place governed by chaos, as well as, provide a modicum of psychological tranquility for the country's horrified bystanders; assurances, pacifications, and pledges of investigation and retribution were commonplace. The concrete practicality of this methodology, however, does not consider the degree of abstraction inherent within the complex determination of resolutions and implications generated as a result of the personal, professional, and employer-employee dilemmas a catastrophe of this magnitude created for not only the health care recipients but for the health care providers as well.

According to the U.S. Department of Labor (2005), registered nurses comprise the largest group of health care personnel. The majority of registered nurses (three out of every five) are employed as clinicians in acute care hospitals where they are responsible for providing direct care to the physiologically and/or psychologically compromised. In this setting, the prevailing ethical conflicts are most often client-driven and are most frequently associated with issues of well-being, choice, privacy, and cost/insurance reimbursement. The proximity of the client-nurse relationship facilitates the nurse's involvement in various stages of the ethics procedural process. Therefore, nurse clinicians, administrators, educators, and researchers within these facilities may often find themselves involved in and/or impacted by the ethics inherent to the delivery of health care services. In addition, federal and state regulatory agencies often require that specified breeches of ethical standards and suspected ethical misconduct be reported, tracked, and a corrective action plan is developed and implemented. Punitive penalties in the form of monetary disbursements may also be levied on offending organizations (Department of Justice, 2003). For this reason, ethical dilemmas that are wholly client-centered may well appear to be the customary model.

While national health care organizations and professional associations (e.g. American Hospital Association, American Nurses Association, and American College of Health care Professionals) advocate the incorporation of codes of ethics at all institutional levels, ethical analyses of institutional policies and procedures that directly impact the psychological and personal well-being of nursing personnel appear to be regulated less stringently. In addition, the initiatives that are promoted to advance policies dedicated to the well-being of nurses is relegated to the sector of workplace advocacy and continue to focus on client-driven safety and outcomes measures despite the plethora of studies implicating stress and ethical ramifications, among other variables, as growing concerns for nurses (Arkansas Nurses Association, 1997). As such, there appear to be widespread disconnects regarding the emphasis that health care workers place on personal and familial interests and their implications for not only policy development and implementation but for medical decision-making and patient safety as well. This is particularly significant in geographically susceptible areas of the Gulf Coast where inclement weather poses the threat of catastrophic destruction and therefore, the increased probability of ethics-driven scenarios requiring resolutions derived from a reliable decision-making model.

Bioethics, Principlism, & Ethical Dilemmas

An ethical dilemma can be described as a presenting event that requires commitment to a single obligation when two or more genuine duties exist; the resultant outcomes have option-specific variability; and moral regret is a residual, demonstrative manifestation of the selection process (Beauchamp & Childress, 2001; Demarco, 2005). An array of broad theoretical constructs exists to facilitate navigation through various ethical crises (e.g. teleological, deontological). From these constructs, distinct, specific conceptual approaches were formulated that allow those facing ethical dilemmas to select a philosophical decision-making perspective that is most personally congruent as well as most applicable for their area of professional practice (e.g. utilitarianism, communitarianism). It is beyond the scope of this article to delineate the fundamental principles for all of the decision-making approaches to an ethical dilemma. Therefore, the four principles approach, a major component of the nurse-centered framework central to the theme of this article will be the focus of further discussion.

Principlism, a deontologic-inspired principle-based theory, is an approach tailored specifically to facilitate identification, analysis, and resolution of dilemmas germane to concerns within the health care sciences (Beauchamps & Childress, 2001). The premise of deontological theories is the assertion that the worth of an action(s) is not solely dependent on a good outcome. Some actions are right (or wrong) for reasons other than their consequences. The values of autonomy, beneficence, non-maleficence, and justice are fundamental elements of principlism, because of their near unanimous acceptance. In addition, its relatively simplistic conceptualization, checklist amenability for verification of value consideration, frequent literary reference, and applicability to decision making has augmented its favor with health care professionals. According to Boyd (2005), the key determinate for the utilization of this approach is whether a potential course of action is morally right and corresponds with an established moral principle. However, similarities with the theory of prima facie (i.e. conditional) obligations increase the probability of value conflict during any given dilemma, necessitating a determination of hierarchical worth (e.g. autonomy issues versus beneficence issues); erroneously perpetuating the inclusion of beliefs, feelings, culture, religion, and or science into the ethical equation as decision-making antecedents (Markkula Center for Applied Ethics, 2006).

Many post-Katrina scenarios positioned nurses as well as other health care personnel in the unenviable position of hierarchical quantification of the value principles inherent to the theory of principlism for clinician-centered dilemmas. Perspectives on the utilization of theoretical approaches to decision-making ranged from broad, (e.g. utilitarianistic approach versus deontologic approach to mandatory evacuation); to midrange (e.g. communitarianism approach versus principle of justice to mandatory evacuation); to specific (e.g. value of autonomy versus value of justice to mandatory evacuation). To support model comprehension, comparative identification of the meanings for each value principle, client versus clinician, is presented in Table 1. Dilemmas testing the applicability of principlism in general and the value principles specifically were innumerable. For the purpose of this article, autonomy, the value principle grounded in the respect for individual self-regulation, will serve as the decision-making focal point. Value principle categorization inherent to principlism, ethical dilemmas, and the ethical decision-making process specific to issues of autonomy and the case study that follows is outlined in Table 2.

Table 1
Components of principlism with corresponding client and clinician-centered descriptions.

Value Principle	**Descriptive**	
	Client-Centered* Requires that health care professionals:	**Clinician-Centered** Requires that health care organizations (representatives):
Autonomy	Do not interfere, limit, or attempt to prevent meaningful client choices.	Allow employees to exercise autonomy without the threat of reprisal or repercussion
Non-maleficence	Do not act in ways that may cause intentional harm or injury to clients.	Do not knowingly place employees in a situation that is detrimental to their health
Beneficence	Act in ways that contribute to and promote the client's welfare	Act in ways that promote employee welfare
Justice	Provide fair, equitable, and appropriate treatment taking into consideration what is due or owed	Organizational benefits (promotions) and burdens (reprimands) are allocated equitable and judiciously

* As defined by Beauchamps and Childress (2001) and Mappes and Degrazia (2001).

Table 2
Competing value principles and case study dilemmas experienced by post-Katrina nurses

Competing Issues	**Dilemma**
Autonomy vs Non-maleficence	Mandatory evacuation with spouse vs. duty to employer despite risks
Autonomy vs Beneficence	Evacuation of self and ill spouse post-Katrina vs. mandatory lock-in
Autonomy vs Justice	Evacuation of self and ill spouse post-Katrina vs. employer contract for provision of spouse's medical needs

Ethical Decision Making

Dilemma complexity, experiential competence, implementation brevity, and the lack of familiarity with an applicable framework to guide the decision-making process could prove to be morally and professionally ruinous, particularly for novice decision makers. In addition to and unlike the indirect relationship and affect of a client-driven crisis, the direct dyadic relationship of the nurse as both benefactor and recipient of the decisional outcome creates an internal dynamic that may be distinctly autonomous for this population. Although a dearth of information on ethics, ethical decision-making, and decision making models is available on a continuum from global to specific, the complexity of the decision-making process for nurses, particularly in the face of duress, may require re-examination of current models and or the reflection of these themes in future models. To facilitate the application of the ethical decision-making process, a conceptual model that is both comprehensive in scope and simplistically understandable is presented. This conceptual model is an eclectic paradigm integration of components from the nursing process, the theory of biomedical principlism, and philosophical ethical perspectives. The proposed model illustrates the inter-relationships among these components to promote and facilitate the ethical decision making process.

The first model component, an adaptation of the nursing process, is a theoretically simplistic, cyclical, process for deliberative, systematic, and organized problem solving (Fawcett, 2000). Because of its extensive use in clinical decision making, the introduction of this method during undergraduate education promotes its utility for nurses within this model. To this extent, only four (i.e. assessment, planning, implementation, and evaluation) of its five concepts are utilized. The concept of diagnosis, as a clinically driven platform, has been omitted. Similar to Cassells and Gaul (1998) ethical assessment framework for patient-outcomes decision making, the nursing process as a standard for its analytic maneuvering is well documented throughout the health care literature. As such, its applicability to ethical decision-making that is nurse-driven is logically concluded and thus is the fundamental foundation for this model.

The second component of this framework integrates the previously discussed theoretical components of principlism, an ethical decision-making theory that has become a staple for bioethics. Similar to the components of the nursing process, all of the components must be deliberated, whether consecutively or simultaneously, and a goodness-of-fit determination established that is situation specific. This stage of the framework is congruent with the planning phase of the nursing process.

The third and final component of this framework designated “Initiators of Conduct”, is reflective of organizational, professional, and personal standards, codes, regulatory statutes, and policies and procedures. Either a working intelligence regarding these subjects or readily available resources for examination is a necessity at this stage. These elements may also be considered consecutively or simultaneously. It is of importance to note that the resultant decisions formed as a result of this analysis will in all likelihood impact the interpretation of the components of principlism within this model. Figure 1 is a schematic representation of the model and its associated components. The model process is initiated when an ethical issue is believed to exist. As a result, a determination is made (assessment) of the ethical issue at hand. An action plan should then be developed based on the components of principlism and the initiators of conduct. Implement the plan of action and evaluate the actions success in achieving the goal.

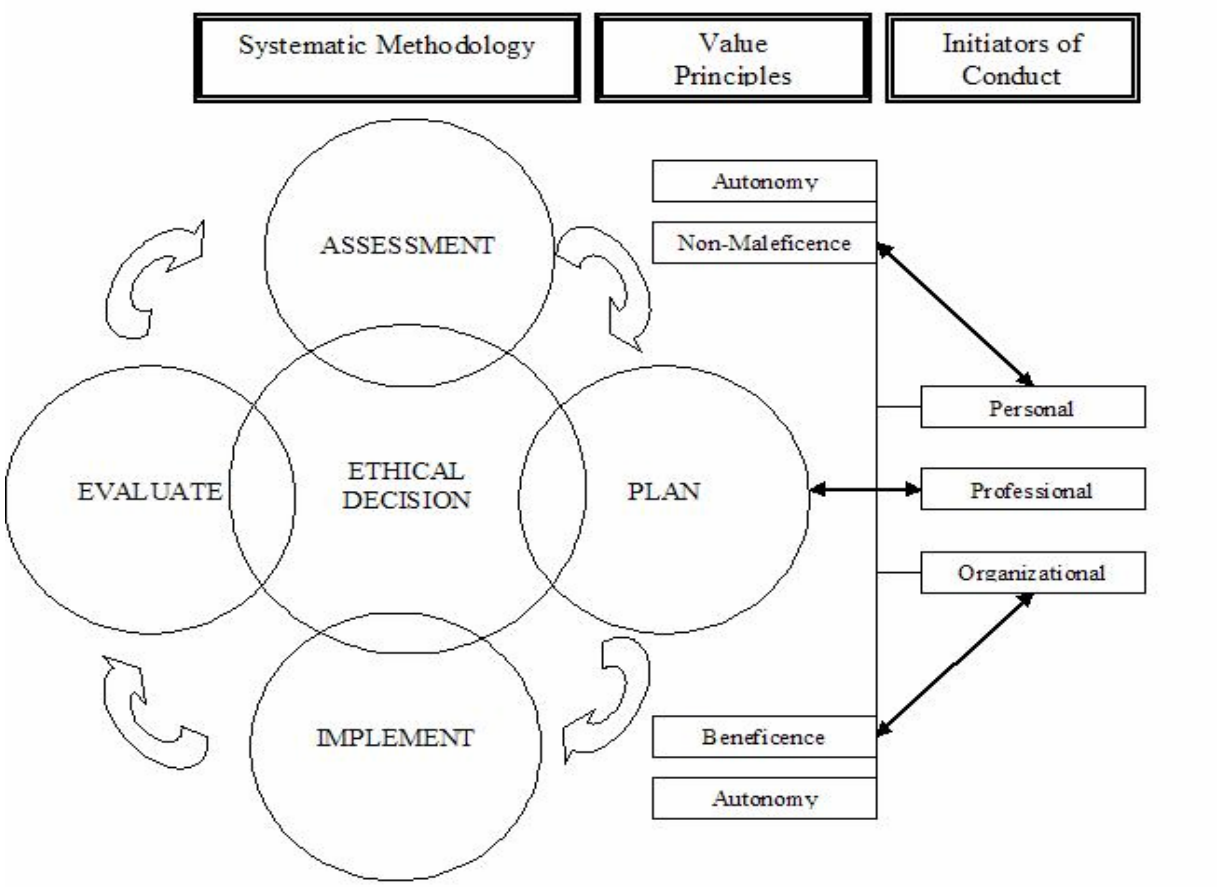

Figure 1: Conceptual schematic of a dyadic nurse-centered decision making framework

Background

Geography

The greater New Orleans Metropolitan area is comprised of eight parishes, (Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John, St. James, St. Tammany), that is home to approximately 1.4 million people and is the 35th largest metropolitan in the United States. According to the U.S. Census Bureau (2003), New Orleans is the largest city in Louisiana with approximately 500,000 residents living in a 500 square mile radius, 50% of which is water. This major port city is 100 miles upriver from the Gulf of Mexico with the Mississippi river running along its Southern border and Lake Pontchartrain traversing its Northern edge. New Orleans is the third lowest elevation point in the United States with approximately 50% of the city sitting 1-10 feet below sea level. The "bowl" effect often described is a result of the city's hydrologic surroundings and depressed elevation.

Meterology

Due to its location and surroundings, flooding and hurricanes are as much a part of the fabric of New Orleans as jazz and Mardi Gras. According to the National Hurricane Center 2005 statistics, from 1851-2004, Louisiana has been assaulted by 49 hurricanes. Approximately 1/3 of these hurricanes are categorized as major, five are among the costliest in U.S. history and 11 are among the most intense to ever make landfall in the U.S. It is of interest to note that these statistics do not include tropical storm systems that made landfall in the area. Despite these hurricane trend indicators and multitudes of predictions and theories (Fischetti, 2001) brought forth by meteorological experts regarding the fate of New Orleans in the event of a direct assault from a major hurricane, it has become extremely clear that no one in the government or industrial communities had adequate evacuation and/or contingency plans developed, evaluated, and ready for implementation.

Hurricane Katrina

According to the National Hurricane Center (2005), on Monday, August 29, 2005, a forecasted category four hurricane with sustained winds of 135 mph winds battered New Orleans with storm surges of 15-20 feet above normal tide levels. These surges were responsible for three major levee breeches and catastrophic flooding in more than 80% of the city. As a result, one of the most famous cities in the world was reduced to uninhabitability; its infrastructure left in ruin, and greater than 99% of its populace ultimately scattered throughout the continental U.S.; a first in recorded history. Hurricane Katrina was the sixth strongest Atlantic hurricane ever recorded and the third strongest to make landfall in the U.S. The death toll has reached nearly 2000 in Louisiana alone, over 700 of which were in New Orleans. Total damages are projected at $81 billion, making Hurricane Katrina the costliest disaster in U.S. history (Wikipedia, 2005).

Health care Demographics

According to the Center for American Progress (2006), there were approximately 34 acute care hospitals operating in the New Orleans metropolitan area with a total bed capacity of 5,707 employing approximately 10,000 licensed nurses. These facilities included a major VA medical center, the largest state-funded health sciences/level 1 trauma center, a regional children's acute/ambulatory care facility, and several other non-profit and for-profit medical centers with bed capacities greater than 400. Within the city, all of the hospitals had nursing staff and staff family members stranded in the aftermath of Hurricane Katrina that required evacuation. The length of stay within the confines of the hospitals prior to being evacuated ranged from 48-160 hours. All of the hospitals in the city of New Orleans were ultimately closed. Currently, only Touro Infirmary and Children's Hospital are operating at near normal pre-Katrina capacity. However, greater than 50% of the licensed nurses currently employed at these health care facilities are either contract or per diem agency employees.

Workplace Advocacy

The American Nurses Association (ANA) does not have a position statement that addresses workplace advocacy issues for registered nurses who live in and or employed in areas that are at high risk for catastrophic outcomes as a result of natural disasters. Current position statements address issues involving the rights, responsibilities, and deployment of registered nurses to disaster areas post-disaster (ANA, 2002a & 2002b). However, provision 5 of the ANA code of

ethics (2001) states that "the nurse owes the same duties to self as to others." Indeed the ANA also recognizes that the nurses professional and personal lives are entwined and that duty to self is in itself symbolic of wholeness of character.

The Louisiana State Board of Nursing (LSBN) does not provide declaratory statements on employee-employer related issues. Similar to the ANA, there is a declaratory statement regarding the deployment of Louisiana nurses to disaster areas as well as endorsements of outside nurses that volunteer to work in Louisiana post-disaster. The LSBN does, however, define abandonment as "leaving a nursing assignment without properly notifying the appropriate personnel" (LSBN, 2002, p.12). Despite the position regarding employee-employer issues, the board does not preclude the submission of any nurse for investigatory review for possible disciplinary action. The merit, and therefore the initiation and progression of disciplinary action, of each submission are reviewed on a case-by-case basis. However, there is no precedence for outcomes that place the nurse and or their families in imminent danger. Without an objective evaluative instrument to guide the investigatory process, decisions formulated by these nurses must support all competing perspectives and must therefore be judgmentally and justifiably sound.

Case Study

The case study that follows is an adaptation of an actual ethical crisis that confronted nurse clinicians and administrators in New Orleans, Louisiana, as a result of the imminent collision of the city and its inhabitants with Hurricane Katrina. This case study is designed to afford the reader an opportunity to: (a) develop potential resolutions via the integration of professional and personal ethics and reasoning; (b) reflect on the psychological impact of morale decision-making processes during a crisis; (c) stimulate dialogue regarding self and or family-preservation versus organizational responsibility; and (d) evaluate the responsibility of nursing's national and state governance in developing a position statement regarding issues of imminent danger versus dereliction of duty.

Case

David was employed as a staff nurse at a 300-bed tertiary care facility in uptown New Orleans. The hospital's staffing solution for its hurricane response plan was the creation of a three (3) tier hurricane disaster response team. Nurses were assigned, based on personal preference, to disaster tiers 1, 2, or 3. Tiers 1 and 2 were considered essential personnel and as such would be expected to report to the hospital, usually 24 hours prior to hurricane landfall, to provide patient care during the hours before, during, and after (usually 12 hours) a hurricane's arrival and departure. During this time, the hospital would initiate a "lock-in" mode whereby no essential personnel were allowed to leave the hospital premises. The "lock-in" phase of the hurricane plan would end immediately after the weather stabilized, however, essential personnel would not be allowed to leave until Tier 3 relief arrived. It was the responsibility of the personnel assigned to tier 3 to provide a recovery and relief period for those personnel of tiers 1 and 2.

David and his wife were preparing to evacuate New Orleans as a result of Hurricane Katrina, as mandated. During that time, David received a phone call from a friend who was a tier 1 member requesting that David stop by a local store, pick up some toiletries, and drop them off to him on his way out of town. David arrives at the hospital with his friend's supplies and is

greeted with the news that implementation of the mayoral mandated evacuation request has caused a mass exodus from the city. As a result, more than 75% of the essential personnel from tiers 1 and 2 are evacuating the city and have notified the hospital of their inability to fulfill their obligation as disaster response team members.

David's wife is an insulin dependent diabetic who is on a strict dietary, medication, and exercise regime. Therefore, David has never accepted a position that would require that he be designated as essential personnel. In addition, David has never failed to report to work as a tier 3 relief personnel. The shortage of nurses has prompted the hospital's administrators to locate alternative personnel for the critical "lock-in" period. David is recognized by a nursing administrator, who pleads with David to stay and assist during this crucial time. David explains why he cannot stay and is assured by the administrator that he and his wife will have suitable lodging and that her medical and dietary needs will be attended to accordingly.

There were more than 2000 employees, family members, pets, and clients sheltered in the hospital pre and post-Katrina. Eight hours post-Katrina, the hospital has only essential electricity. Water and food had also begun to be rationed. Due to the catastrophic flooding and wind-damaged bridges and highways, the city became virtually inaccessible to those from the outside. Therefore, there would be no tier 3 nursing relief. David has just completed his final 12-hour shift when his wife informed him that her blood glucose was 276. Unbeknown to David, her diabetic meals had been altered as a result of food and water rationing. In addition, the diversion of electricity had left her insulin in an uncontrolled environment. David located the nursing administrator to give notification that he is leaving as a result of his wife's condition. David is informed, by the administrator, that if his wife's condition worsens she will be medically cared for, but leaving the hospital at that time will constitute job abandonment and would therefore, be reported to the Louisiana State Board of Nursing for possible disciplinary action.

Discussion

Utilizing the previously described decision-making framework, review the questions below and formulate possible solutions. Keep in mind; this is a dyadic nurse-driven model where the outcome will directly impact not only the nurses and their families but the hospitalized clients as well. This exercise may be completed as an individual or group endeavor.

(a) Was David's decision the most appropriate decision?
(b) If placed in the same position, what would your decision have been?
(c) Were there any other ethically sound options that David could have employed?
(d) Should professional and governing organizations for nursing declare a position regarding nurses who live and or work in high-risk areas of the country?
(e) Was the nursing administrator's decision ethically sound?
(f) Should David receive a state board reprimanded for his actions?
(g) Should the nursing members of tiers 1 and 2 receive a state board reprimand for not reporting to work?

References

American Nurses Association (2002a). *Rights and responsibilities related to work release during a disaster*. Retrieved on January 30, 2006, from: http://www.nursingworld.org/readroom/position/

American Nurses Association (2002b). *Position statement on work release during a disaster – guidelines for employers*. Retrieved on January 30, 2006, from: http://www.nursingworld.org/readroom/position/

American Nurses Association (2001). *Code of Ethics for Nurses with Interpretative Statements.* Retrieved on January 30, 2006, from: http://www.nursingworld.org/ethics/ecode.htm

Arkansas Nurses Association (1997). White Paper on Workplace Advocacy in Arkansas/Louisiana. Retrieved on January 30, 2006, from: http://www.arna.org/snas/ar/wkplace/

Beauchamp, P.T. and Childress, J. (2001). Principles of Biomedical Ethics (5th ed.). Oxford University Press: Oxford

Boyd, K.M. (2005). Medical ethics: Principles, persons, and perspectives: From controversy to conversation. *Online Journal of Medical Ethics*, 31, 481-486. Retrieved on February 1, 2006, from: http://www.bmjjournals.com

Cassells J. and Gaul, A.L. (1998). An ethical assessment framework for nursing practice. *Maryland Nurse*, 17(1), 9-12.

Center for American Progress (2006). Katrina by the Numbers: Need for Healthcare Assistance in Louisiana. Retrieved on January 30, 2006, from: http://www.americanprogress.org/site/pp.asp?c=biJRJ8OVF&b=1101085

DeMarco, J.P. (2005). Principlism and moral dilemmas: A new principle. *Online Journal of Medical Ethics*, 31, 101-105. Retrieved on February 1, 2006, from http://www.jme.bmjjournals.com

Fawcett, J. (2000). Orlando's theory of the deliberative nursing process. *In Analysis and evaluation of contemporary nursing knowledge: Nursing models and theories*. F. A. Davis Co. Philadelphia

Fischetti, M. (2001). Drowning New Orleans. *Scientific American*, 284(10), 62-72.

Louisiana State Board of Nursing (2002). Most Frequently Asked Questions. Retrieved on March 15, 2005, from: http://www.lsbn.state.la.us/documents/selfstudy/mfaqcourse.pdf

Mapps, T.A. and Degrazia, D. (2001). Biomedical Ethics (5th ed.). McGraw-Hill: New York.

Markkula Center for Applied Ethics (2006). Ethical Decision Making. Retrieved on January 30, 2006, from: http:// www.scu.edu/ethics

National Hurricane Center (2005). Hurricane History. Retrieved on March 15, 2006, from: http://www.nhc.noaa.gov/

United States Census Bureau (2003). Statistical Abstract of the United States: 2003. The National Data Book, 123rd Ed, Library of Congress: Washington, D.C.

United States Department of Justice (2003). Largest Health Care Fraud Case in U.S. History Settled HCAInvestigation Nets Record Total of $1.7 Billion. Retrieved on March 15, 2006, from: http://www.usdoj.gov/opa/pr/2003/June/03_civ_386.htm

United States Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (2005). Retrieved on March 15, 2006, from: http://www.bls.gov/oco/ocos083.htm