Dr. Anna Pou: Hero, Criminal, or Victim?

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Abstract: When Hurricane Katrina devastated the city of New Orleans, Memorial Medical Center faced a terrible crisis. The hospital's generators stopped working, rescue helicopters were scarce, and patients began dying from not only their illnesses but also dehydration and a lack of resources. Dr. Anna Pou, the only female physician on duty, had the challenge of deciding what action to take for the LifeCare Unit patients, dying elderly people living out their last days, who had little chance of survival. After two evacuations and enacting an emergency triage plan, the staff and remaining patients began losing hope. If Pou decided to euthanize the LifeCare Unit patients, or perhaps simply sedate them, would she still be remaining loyal to the Hippocratic Oath? Is she legally responsible for this decision during such extenuating circumstances? In addition, why should the blame be placed on the one person who took charge during the crisis? People are not used to seeing women in leadership positions, let alone straying from the stereotype of being "nurturers."

Hurricane Katrina and the Memorial Medical Center

On August 29th, 2005 at 6:10am, one of the deadliest natural disasters in history struck the city of New Orleans, Louisiana. Hurricane Katrina had winds of 150 miles per hour that caused flooding, power outages, and over \$81 billion worth of damages to the city (Stevens 2015). When Hurricane Katrina first hit, the city itself was not destroyed. Most of the damage occurred in the hurricane's aftermath. On August 29th at 2:00pm, 53 levees burst, allowing water from Lake Pontchartrain and the Gulf of Mexico to flow into the city. New Orleans was drowning.

About seven miles away from the broken canals stood the Memorial Medical Center in Uptown New Orleans. Once called the Southern Baptist Hospital, Memorial was one of the best hospitals in New Orleans. Conveniently located between expensive Uptown mansions and a public housing project, Memorial had diverse clients. It also had an \$18 million cancer institute and a recently renovated labor and delivery center that cost \$5 million (Fink 2013).

Due to its tall, eight-story, redbrick exterior, Memorial seemed indestructible (Wecht and Kaufman 2008). During Hurricane Katrina, the hospital sheltered about 2,000 people. There were 244 sick patients, and the other 1,500 people were family members of sick patients, hospital staff and the staff's families. In addition, there were many pets sheltered there for the storm (Fink 2009). Many people did not feel safe enough in their own homes and viewed Memorial as a safe haven.

On August 29th in the evening, an on-site ambulance worker heard from one of his dispatchers that the levees had been breached (Fink 2013). Water from the Gulf of Mexico and Lake Pontchartrain began flooding New Orleans. This is when the emergency team at Memorial realized that water could be heading toward the hospital.

Eric Yancovich, the hospital's plant operations director, had been told he should prepare for 15 feet of water. Yancovich knew Memorial's backup power system had a monumental flaw: the generators were housed in the hospital's basement (Fink 2013). With floodwaters headed towards Memorial, Yancovich knew they were in trouble. The hospital's standard hurricane relief plan "relied on the assumption" that the generators would continue working (Fink 2013).

The first evacuation process began shortly after the news of the levee breaches on August 30th. The original plan was to evacuate all 244 patients as soon as possible. Unfortunately, Memorial needed a helicopter to rescue the patients but other New Orleans hospitals had booked up all the helicopter transport companies in the area (Fink 2013).

The Government's Plan

The local government had no evacuation plan and the federal government had no rescue plan. Many people argue that FEMA was so concerned with the possibility of another terrorist attack that it failed to properly prepare for the inevitable disaster that struck New Orleans (Borger and Campbell 2005). In addition, there were not enough National Guard members present to assist with the crisis because 3,000 of the personnel from Louisiana were in Iraq with much of the equipment that New Orleans needed, such as generators and high-water vehicles.

The people of New Orleans continue to blame the government for the lack of an adequate rescue response. Officials report assuming most people would have done as they were told and evacuated. The government did not realize that they "grossly underestimated" the number of peoples who were not fortunate enough to own cars (Borger and Campbell 2005). Many locals were left stranded in their homes, awaiting the inevitable disaster.

Memorial's First Evacuation

Within a few hours of the emergency team attempting to contact the company, Tenet, that owned the hospital, a National Guard troop hauler made it to the hospital to rescue about a dozen people (Fink 2013). Around the same time, a Coast Guard helicopter arrived to transport more patients. The hospital staff decided their top priorities were to save the newborns, ICU patients, dialysis patients, and high-risk pregnant mothers first (Fink 2013).

To get to the helicopter pad, patients had to be walked downstairs, put through a small hole that was a shortcut to the parking garage, driven up to the top of the parking garage, and then carried up two flights of stairs (Alder 2016). The elevators had stopped working because of the flooding, and this was the quickest way to get to the helipad. How could sick people on the verge of death make it through all those obstacles? Physicians and staff took it upon themselves to carry patients who were not strong enough to climb the stairs.

The physicians decided to let the helicopter take the newborns to optimize space. Nevertheless, physicians had to argue with the helicopter pilot to allow all the babies to fit onto the plane because it was against protocol. The pilot was frustrated that Memorial was "the most unorganized hospital he had been to" compared to all the other hospitals he had rescued patients from that day. (Fink 2013, 95). After this first evacuation, there were still about 150 patients left in the hospital. Helicopters were almost impossible to get because of the ongoing demand from different areas in New Orleans.

Memorial Medical Center's generator stopped working on August 31st at 2:00am. The floodwaters had reached the generators in the basement. The hospital became pitch black. Immediately, five patients on life support died. By the end of the day, 60 patients had died from physicians' inability to measure their vitals and provide them with the necessary treatments they

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needed to live. There were only about two dozen physicians on duty (Fink 2009). The hospital's temperature rose to over 100 degrees Fahrenheit (Fink 2013). People were passing out from dehydration, and physicians had scarce access to resources and files. Because there was no access to these files, physicians were unable to access to any information about the patients' histories or why they were even admitted to the hospital. The morgue overflowed and the hospital began smelling like human waste (CBS and Schorn 2007).

Water kept rising. It became evident that not everyone could be saved because of the lack of rescuers. During this time of crisis, certain physicians took charge. Dr. Anna Pou, a 49-year-old otorhinolaryngologist (a head and neck surgeon) was one of only two female physicians who continued caring for patients throughout this whole process. Many physicians had stopped doing their job to care for their families who were also taking shelter in the hospital. Even when the Chief of Surgery told Pou to stay home with her husband because they had just bought a new house and wanted to make sure it would withstand the hurricane, she insisted on staying at the hospital for the storm (Fink 2013).

Dr. Anna Pou

Dr. Pou is the daughter of immigrants. Her father, Dr. Fredrick Pou, was born in the Dominican Republic, and her mother, Jeanette Pou, is Sicilian-American. Pou was the third youngest of eleven children. Pou learned how to take care of others at an early age because of her younger siblings (Fink 2013). Her father, also a physician, worked endless hours. Occasionally, he allowed Pou to join him on weekend calls (Fink 2013).

However, Pou did not always aspire to be a doctor. Although she began college at Louisiana State University as a pre-med student, Pou became a medical technologist (Fink 2013). Medical technologists work in medical labs to analyze blood and urine samples using microscopic techniques. She first realized her job did not fulfill her after she attended a pool party in her mid 20's where one of her friends almost drowned. Pou reacted immediately and performed CPR to save his life (Fink 2013).

Due to her late realization, Pou was accepted into Louisiana State Medical School at the age of 30. She did an otolaryngology residency in Pittsburgh and then decided to subspecialize in surgery for head and neck cancers after one of her brothers died of lung cancer at 43 years old (Fink 2013). Although she was married, due to her demanding career and age, Pou decided not to have children. She finally finished her medical training at the age of forty-one (Fink 2013).

After working in Texas for a few years, Pou returned to New Orleans when her father died in 2004. She was offered a job at Memorial Medical Center and as an associate professor at LSU School of Medicine. Since Pou wanted to be close to her mother following her father's death, it was a perfect opportunity to move back to New Orleans. Pou often says that her mother's ability to "steer [their] family through crisis" taught her how to be a tough and strong woman (Fink 2013, 40). Three of her siblings had died, one was diagnosed with a serious illness, and her oldest living brother was convicted for drug trafficking (Fink 2013). Pou's life lessons taught her how to be not only resilient, but also considerate of other people. Many of Pou's colleagues referred to her as a "strong patient advocate" (Fink 2013, 42).

During Hurricane Katrina, Pou was described by a fellow doctor as a "female lone ranger". "Pou was among the few doctors still caring for patients inside the stifling hospital. Some physicians had departed; those who hadn't, for the most part, were no longer practicing medicine..." (Fink 2013, 8). When given the opportunity to leave after the hurricane, but before the flooding, Pou declined again. She wanted to stay and care for patients. Pou claims that being a physician is "the best thing" about her life (CBS and Schorn 2007).

Dr. Pou and the LifeCare Unit

After helping load the babies onto the helicopter on August 30th for the first evacuation, Dr. Pou went to the 7th floor of the hospital after a Code Blue sounded from the LifeCare Unit (Fink 2013). Code Blue indicates that there is a patient that has stopped breathing and needs resuscitation. LifeCare Corporation, a for-profit company that rented space in Memorial hospital, provided long-term treatment to extremely sick, elderly and debilitated patients. Their unit in Memorial was a hospital within a hospital.

Dr. Pou got to the 7th floor to care for the 73-year-old man that had stopped breathing. (Fink 2013). Using nothing but a small flashlight, she inserted a breathing tube into the man's throat that pumped oxygen into his lungs. The elderly man began quivering, which indicated the tube was not working properly. Luckily, an ER doctor arrived and was able to resuscitate the patient. It is uncommon for head and neck surgeons to perform CPR (Fink 2013).

Pou then took it upon herself to analyze the rest of the LifeCare Unit patients. No LifeCare physicians were present in the hospital, so the Memorial staff knew they should assist. With the lack of water, electricity, and her usual tools, Pou felt "sad, heartbroken... and shocked at the lack of organization—the fact that there was no type of coordination" (Scelfo 2007). She fanned patients using cardboard, changed adult diapers, and had to resort to using dirty sink water to keep the elderly patients hydrated.

According to a nurse in the unit, Memorial thought the LifeCare patients would be rescued by FEMA separately from the rest of the hospital's patients because the unit does not belong to Memorial. LifeCare had their own corporate officials (Fink 2013). It was not Memorial's obligation or priority to rescue LifeCare patients because they could barely evacuate their own patients. In addition, even if Memorial wanted to rescue LifeCare patients, they would need permission from their own overhead company, Tenet.

In the LifeCare unit, one man stood out. Emmett Everett, an elderly man, had gotten himself breakfast that morning. He was alert and friendly with the other patients. He was in the LifeCare Unit awaiting colon surgery (Alder 2016). However, the physicians knew Emmett could not be rescued. He was paraplegic, in his mid 60's, obese, and had recently suffered from a spinal cord stroke (Fink 2013). They believed there was no way he could make it all the way to the helicopter pad to be rescued.

How could Pou save Everett and the rest of the LifeCare patients? As a cancer specialist, Pou believed in giving hope to her patients. She would pride herself in never giving up on them and always giving them every last possible chance to survive (CBS and Schorn 2006). Yet Pou and the rest of the staff were soon notified that the rescuers for the second evacuation process would take a longer time to come than they did for the first evacuation two days before.

The Second Evacuation and Emergency Triage

After two days with no electricity and no word from the government, patients were frantic, people were yelling, and the staff felt helpless after receiving barely any assistance from outside the hospital. On August 31st, a day after the first evacuation, physicians decided to begin triage, a process used in emergency medical situations to determine priority of patient treatment based on degree of sickness (Wagner and Dahnke 2015). Triage was created to ration patient treatment

efficiently when resources are not abundant enough for all patients to be treated immediately (Wagner and Dahnke 2015).

After contemplating the different types of triage, the staff agreed to perform reverse triage because the hospital conditions were dire. Reverse triage is the most efficient type of triage in stressful situations, especially for natural disasters, because it identifies the patients who are least in need of urgent treatment. The staff chose reverse triage because they were concerned with the terrible conditions inside the hospital, which could get family members and other healthy people sick (Fink 2013). The smell of human waste burned the backs of people's throats, there was no clean water, and the temperature kept rising.

To categorize the patients, doctors used a numbering system. Number one was assigned to about 40 people. It represented relatively healthy people who, on any other day, could be discharged from the hospital. Number two represented the patients that have not fully recovered but were healthy enough to get to the helicopter pad with some assistance. Number three was given to DNR (do not resuscitate) patients and extremely sick patients. They were the last priority. Healthy people would take airboats.

The decision to make DNR patients evacuate last was an exception to typical rescue procedures. Usually, patients that require more assistance are chosen to be evacuated first, regardless of DNR orders. The staff at Memorial assumed the DNR patients cared less about living than other patients. To come to this conclusion, the staff agreed to use a Utilitarian Approach. Utilitarianism is a society-based approach that believes that actions are right if they are useful or for the benefit of a majority. (Anders 2014). In the context of Memorial, this means that the patients were not seen as individuals; they were seen in terms of how they affect the population. A DNR instructs medical professionals to refrain from performing CPR if their patient stops breathing. The staff at Memorial believed that they were following the Utilitarian Approach's belief that DNR patients had less to offer society, which is why they were set to evacuate last. They came to this conclusion because it seemed as though these patients had the "least to lose" (Wagner and Dahnke 2015). Families, who were still taking shelter in the hospital, were confused about the numbers placed on their chests but the physicians thought it was best not to explain the labeling system.

The Dilemma

Pou decided to approach Susan Mulderick, the rotating emergency incident commander, who was a 54-year-old nursing director. Pou wanted to know if the LifeCare patients would be rescued. Mulderick told her that she did not expect the patients to be evacuated. Another physician, Dr. Cook, gave Mulderick the idea of euthanatizing patients who were in pain and who would not make it out of the hospital. When asked if he could administer it, Cook said he had to leave by boat to rescue his son. Therefore, he suggested Mulderick ask one of his colleagues.

After being told of the idea to euthenize patients, Mulderick wanted to find someone to perform the actual task. She first spoke to Pou about euthanizing pets because the rescuers refused to save them. Mulderick then suggested Pou should consider administering a combination of morphine and benzodiazepine sedative to the LifeCare patients who were dying (Fink 2013).

What were the physicians supposed to do when they were told their sick, elderly patients have no chance of being rescued? Should they let the patients suffer until they died? Pou was feeling vulnerable and had barely slept for the past 3 days. How was she expected to make a rational decision? Mulderick, her boss during the disaster, suggested she do something that goes against the Hippocratic Oath because of extenuating circumstances. Pou was given the burden of

making this decision, and she knew she had to decide quickly. Patients' lives depended on it (Fink 2013).

Medical Ethics

Physicians must take the Hippocratic Oath the day they graduate medical school. The oath requires physicians to swear upon various statements that they vow to uphold professional ethical medical standards. The oath is named after Hippocrates, an ancient Greek physician who is known as the "father of medicine." It also marks the early stages of medical training (North 2002). Since it was created centuries ago, there have been updated versions that better represent 21st century values. For example, the new version states, "I will respect the hard-won scientific gains of those physicians in whose steps I walk…" (North 2002, n.p.) The older version has no mention of scientific research because it did not truly exist yet.

If a physician's role is to help a patient, does that include minimizing the patient's pain no matter the consequence? What if Pou decided to simply sedate the patients without euthanizing them? According to the Hippocratic Oath, it can still be considered immoral (North 2002). When patients are sedated, they are unable to eat and drink; this could eventually lead to death as well. The options were far from ideal: give the patients enough morphine to euthanize them, give the patients enough morphine to sedate them and hope rescue comes on time, or let the patients suffer as they near their seemingly inevitable deaths.

One of the lines in the Hippocratic Oath requires physicians to state, "I will not give a lethal drug to anyone if I am asked, nor will I advise such a plan." Although much of the original oath is outdated, this line is still included in updated versions. Over centuries there has been an endless debate about euthanasia and whether or not it violates the Hippocratic Oath (Woodbury 2012). Many believe that euthanasia contradicts the physicians' purpose of using the art of medicine to prolong lives.

However, the oath also mentions that physicians must make decisions according to their best "ability and judgement" (North 2002, n.p.). Pou's second option, to simply sedate the patients, could technically be allowed according to the oath. However, another line makes physicians vow not to do any "harm or injustice to" their patients. Sedating the patients could lead to their deaths because they would be unable to eat or drink. This line also relates to Pou's third option: letting the patients suffer until they die. Pou would be able to relieve the suffering, which means by not assisting them, she would be technically harming them. She would be allowing them to feel pain and slowly die from it.

Lastly, the oath states, "I will apply, for the benefit of the sick, all measures [that] are required." Again, this line is subjective. The "required measures" are simply opinions that each physician decides for themself. The decision, as well as the interpretation of the Hippocratic Oath, is based strictly on the physician's judgment. Some argue that the "oath speaks in broad, normative precepts that are equivocal and idealistic without offering tangible guidance to practicing physicians" (Woodbury 2012).

Protective Legislation

If Pou decided to euthanize the patients, she would have been protected by a law in Louisiana called the Model State Emergency Health Powers Act, which was approved just a few years before Hurricane Katrina (Bailey 2010). It provides immunity to physicians working in emergency situations. The act specifically states that, "during a state of public health emergency, any health care providers shall not be civilly liable for causing the death of, or injury to, any person...." (Bailey

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2010, 729). However, it should be noted that the Act was created after the 9/11 terrorist attacks to serve five basic public health functions: preparedness, surveillance, management of property, protection of persons, and communication (Gostin et al. 2002). The physician immunity section is simply a minor detail and is not the reason that the act was created. It is believed that Pou, like most physicians, had no knowledge of this act, but was fortunate to have it protect her during the indictment (Brody 2008).

Epilogue

Only on September 2nd, five days after Hurricane Katrina hit, did Congress approve a 10.5 billion package for rescue and relief. The FEMA director at the time, Michael D. Brown, immediately resigned after being criticized for sending aid in too late. The people of New Orleans were left stranded for days. According to the National Hurricane Center, about 1,800 people died from Katrina and its aftermath.

After the incident, New Orleans built a new hospital, University Medical Center New Orleans, to withstand winds of 200 mph. It was created as a result of the lack of assistance New Orleans hospitals received during Hurricane Katrina. Scott Landry, the senior vice president of facilities support for LCMC Health, the company that runs the new hospital, said, "What we learned is that the cavalry isn't always going to be able to get to you in a couple of days" (Hughes 2015, n.p.). This disaster not only caused increased hospital emergency preparedness, but also instigated the formation of new medical ethics legislation. Four years after the incident, three laws passed in Louisiana that offer immunity to health care workers during mass casualty circumstances (Fink 2009).

America became fascinated with not only Hurricane Katrina and the city of New Orleans, but also Memorial Medical Center's story. Did the physicians at Memorial murder patients, or did they just try to reduce pain, with the deaths of some patients being unintended and unexpected outcomes? (White 2014). To this day, the world still does not know whether Pou euthanized the LifeCare patients. Most of them died, and the pathology exams found high levels of morphine in their bloodstreams. However, Pou claims that she did not euthanize the patients; she sedated them. Her goal was simply to ease the patients' pain.

Pou was accused of four counts of second degree murder by the Louisiana Attorney General, Charles Foti. He referred to the combination of drugs she used with her patients — a sedative called Versed and the painkiller morphine — as a "lethal cocktail guaranteed to kill" (Drew and Dewan 2006). At the time, Foti was up for reelection and some argued his actions were politically motivated. Many people thought he just wanted to make an example out of Pou. Was Pou the easiest physician to pick on? Was it because she was a woman that he thought it would be an easy case? Did he think the jury would go against a woman who strayed from the stereotype of being a "nurturer" (as most women are expected to be)? Dr. Ewing Cook, the physician who initially suggested euthanasia, was not charged on any accounts.

When the case reached the grand jury in 2007, Pou was not charged on any count. Her record has been expunged and the state of Louisiana repaid her legal fees (Moller 2009). When asked about the allegations years later, Pou stated, "I take care of patients with cancer, so if I was a murderer, it would really be an interesting combination, very incongruous" (Scelfo 2007). During a CBS "60 Minutes" interview in 2006, Pou was faced with the question of whether or not she euthanized patients. Without hesitation she said firmly, "No, I did not murder those patients." (CBS and Schorn 2006).

Dr. Anna Pou did what she thought was right. Should she have been punished for that? During a time of crisis, she shined as a leader and her male colleagues did not. Even though she may not have made the best decision, at least she took charge and made one. Every decision has an impact. Even deciding not to make a decision can have an impact. A disaster does not occur from simply one decision or one mistake. Every person in that hospital contributed to the disorganized catastrophe that occurred in Memorial Medical Center those five days. Hurricane Katrina was a disaster, and the negligence handling the situation only made matters worse. However, one person cannot be singled out for the lack of preparation. The long-lasting effects could have been avoided if the US government, the city of New Orleans, the Memorial Medical Center, if every person involved came together and made the decision to be prepared beforehand. With the correct preparation, a tragedy like this should never happen again.

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Appendix A: Timeline of Events (Fink and Schmidt 2009)

August 26th

• Louisiana Governor Kathleen Blanco declares a state of emergency

August 28th

• New Orleans Mayer Ray Nagin orders a mandatory evacuation for residents

August 29th

- 6:10am- Hurricane Katrina hits New Orleans
- 9:00am- First levee is breached

August 30th

- Morning- Streets around Memorial Medical Center begin to flood
- Afternoon-First evacuation; Staff agrees to evacuate newborns, pregnant mothers, dialysis
 patients, and ICU patients first. A helicopter and truck arrive to save about 90 of those
 patients.

August 31st

- 2:00am- Memorial Medical Center's generator stopped working
- Morning- Physicians begin reverse triage and label patients

September 1st

- Morning- Dr. Pou decides whether to administer morphine to 9 of the LifeCare patients
- Night- Second evacuation for remaining patients, families, and some of the staff

September 2nd

Morning- Remaining staff is evacuated