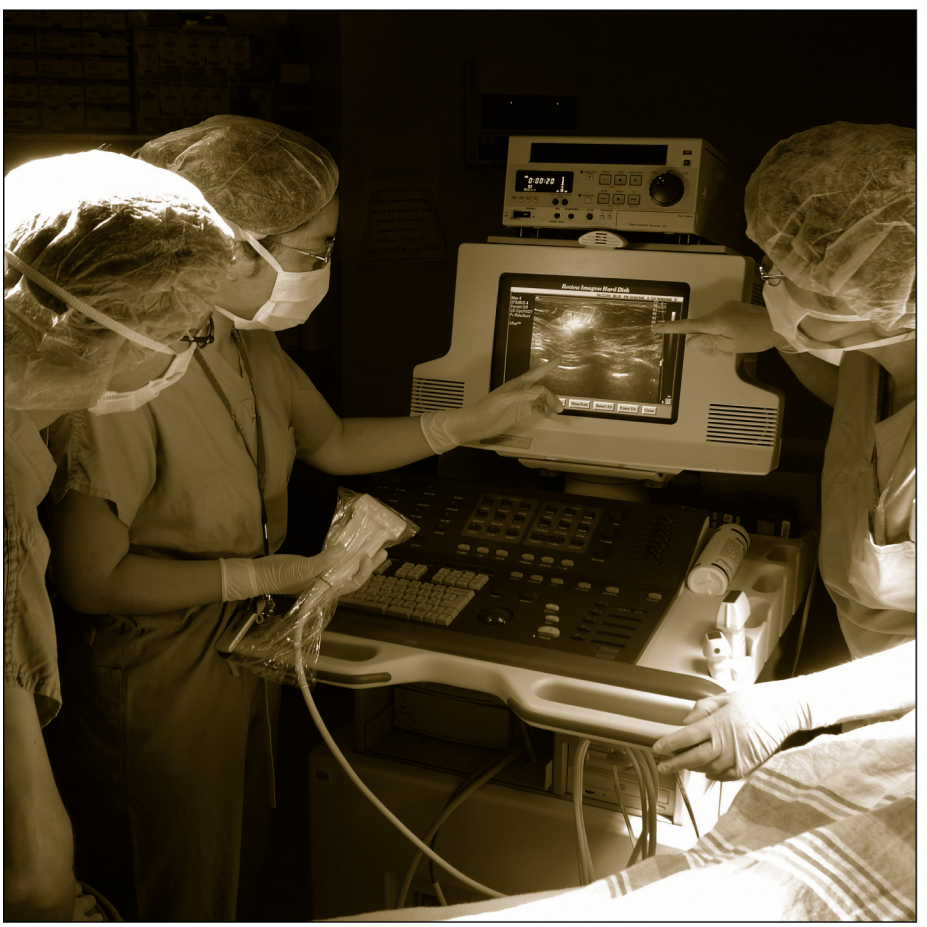
Ethics & Medicine

An International Journal of Bioethics



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2010 Paul Ramsey Award Winner

Leon R. Kass, M.D.

October 28, 2009 – San Ramon, CA – The Center for Bioethics and Culture Network is pleased to announce that Dr. Leon R. Kass has been selected to receive the 2010 Paul Ramsey award, given to those who have demonstrated exemplary achievement in the field of bioethics. Kass, the Addie Clark Harding Professor in the Committee on Social Thought and the College at the University of Chicago, is a pioneer in bioethics who has, in the spirit of Paul Ramsey, made significant contributions toward a proper understanding of the challenges we face in bioethics, to defend the dignity of human life and advance ethical biotechnology. From 2001 to 2005 he served as the chairman of the President's Council on Bioethics and has been writing and thinking about the ethical and philosophical issues raised by biomedical advances for more than thirty years.

Dr. William Hurlbut, who serves on the Paul Ramsey nominating committee said, "Leon Kass is an extraordinarily constructive and courageous voice in bioethics -- a treasure to our civilization. He is the intellectual epicenter of American bioethics."

What is the Paul Ramsey Award?

Paul Ramsey is regarded by many as one of the most important ethicists of the twentieth century. He was a distinguished writer on bioethics and served as Harrington Spear Pain Professor of Religion at Princeton University. His commitment to the sanctity and dignity of human life was paramount to his work.

Every year The Center for Bioethics and Culture Network gives the Paul Ramsey Award to a person that has and is deeply impacting the bioethics discussion.

The recipients of the Paul Ramsey Award demonstrate exemplary achievement in the field of bioethics by actively equipping our society to face the challenges of the 21st century, profoundly defending the dignity of humankind, and enthusiastically embracing ethical biotechnology for the human good.

Gilbert Meilaender, Ph.D., in his address last year as recipient of the 2009 Paul Ramsey Award said, "We've heard a lot about the relation of science and ethics in recent months. A great deal of it confused, and one would have liked to see the Ramsey scalpel go to work on it. One point he would have surely have made – for he made it in different contexts on several occasions. It's a point about what it means to be morally serious."

The 2010 Paul Ramsey Award Dinner will take place Friday, March 19, 2010 at the San Francisco, CA Olympic Club – Lakeside.

To reserve a seat or sponsor a table at the Ramsey dinner visit http://cbc-network.org/ramsey/

EDITORIAL

KILLING EUTHANASIA

C. BEN MITCHELL, PHD

To say that the problem of human suffering is one of the most incorrigible difficulties of our lived experience is to trivialize it. The problem of suffering—and its close cousin, the problem of pain—raises the kind of questions that have kept many a philosopher, medic, patient, or loved one awake at night.

Tackling this problem can be overwhelming. But like all other daunting tasks, sometimes it is best to dissect the problem into several parts. First, suffering may be painful and pain may cause suffering, but the one is not identical to the other. In his very helpful volume, *The Nature of Suffering and the Goals of Medicine*, physician-philosopher Eric Cassell observes that, 'Although pain and suffering are closely identified in the minds of most people and in the medical literature, they are phenomenologically distinct.'

Nevertheless, it is extraordinarily difficult to define pain. Pain is not something we analyze so much as we existentially experience, we feel, we fear. Pain is, as Elaine Scarry puts it in *The Body in Pain,* 'effortlessly grasped.' It is a signal evidence that we exist. To paraphrase Descartes, 'I hurt, therefore, I am.' Pain is an interior state of consciousness: it hurts, it aches, it burns, it crushes, it seas, it stabs. At the same time, pain is subjective and idiosyncratic; I cannot feel your pain.

Happily, with the optimal use of pain management techniques, including analgesics, nearly all physical pain is manageable. Virtually no patients are beyond adequate pain relief. As a scientific skill, medicine must find increasingly efficacious tools to relieve pain.

Suffering, on the other hand, is much more difficult to treat because it is even more complex. Indeed, pain can lead to suffering when, as Cassell says, (1) the pain is so severe that it is virtually overwhelming; (2) the patient does not believe that it can be controlled; (3) it continues for a very long time; and (4) the source of pain is unknown.

Patients whose pain is well-managed may yet suffer. Suffering may be psychological, social, spiritual, and even political. What seems to be a defining characteristic of suffering is that it violates one's integrity as a person. The self may be fragmented, unraveled, and imploded by suffering. Consider the lament of the psalmist: '. . . my soul is full of troubles, And my life draws near to the grave, I am counted as those who go down to the pit; I am like a man who has no strength. Adrift among the dead, Like the slain who lie in the grave, Whom you remember no more, And who are cut off from Your hand' (Ps 88:1-5).

Suffering becomes most unbearable when we are hopeless and alone. So, as a human art, medicine must find increasingly efficacious tools to relieve suffering. Edmund Pellegrino, MD, has pointed out that, 'Seriously ill persons suffer commonly from alienation, guilt, and feelings of unworthiness. They often perceive themselves, and are perceived by others, as economic, social, and emotional burdens. They are exquisitely susceptible to even the most subtle suggestion by physician, nurse, or family member that reinforces their guilt, shame or sense of unworthiness. It takes as much courage to

resist these subliminal confirmations of alienation as to withstand the physical ravages of the disease. Much of the suffering of dying patients comes from being subtly treated as nonpersons. The decision to seek euthanasia is often an indictment against those who treat or care for the patient. If the emotional impediments are removed, and the pain is properly relieved, there is evidence that many would not choose euthanasia.'

If the global euthanasia juggernaut is finally to be resisted, it will be through combining the very best scientific skills at medicine's disposal with the very best of human compassion. Pain is treatable through management techniques; suffering is only treatable through patient-centred personal sacrifice. **E&M**

GREY MATTERS

JUST ENHANCEMENT

WILLIAM P. CHESHIRE, JR., MD

As the United States considers how best to restrain the growth of healthcare costs while ensuring quality and access, the potential economic impact of proposals for enhancement medicine should not be overlooked. This essay makes the case that the practice of neuroenhancement, if it were to become widespread, would infringe upon the ethical principle of distributive justice.

There is growing interest in cognitive performance enhancement pharmaceuticals and uncertainty about how to guide their appropriate use.[1] Licensed, off-label and illicit use of stimulants and other drugs that sharpen mental focus, sustain wakefulness, increase alertness, improve memory or otherwise enhance cognitive capacity has increased among healthy students and professionals.[2] Some pharmaceutical companies have targeted "lifestyle drugs" – prescription products used to improve quality of life rather than alleviating disease – as a potential market for lucrative growth.[3]

The question of whether cognitive enhancing drugs developed to treat the sick should be prescribed also to healthy individuals raises many interesting ethical and social challenges. Debate over whether and how widely to open the door to what has been called "cosmetic neurology"[4,5] has focused on questions of safety, standards of evidence for efficacy, informed consent, autonomy and its limits, the nature of health, the proper role of medicine in society, conflicts of interest, coercive influences, the commodification of human thought, the dignity of human nature as given, and justice.

In regard to justice, three types may be distinguished: commutative, social, and distributive justice. Objections to students taking stimulants to obtain a performance edge on academic examinations or athletes exceeding their natural abilities by taking performance-enhancing drugs appeal to the principle of *commutative* justice, which calls for fairness in competition. Commutative justice would be violated if a pharmacologically enhanced professional, scholar, or athlete were to achieve success in a way that placed others at a disadvantage. Moreover, it would be unclear whether human achievement enhanced through pharmacologic means would truly be earned and worthy of value.

The principle of *social* justice recognizes society's obligation to enable all its citizens to be productive participants through equality of opportunity. The use of medication in patients with cognitive disorders to restore mental function to as near as possible to normal in order to enable full participation in society would be consistent with the principle of social justice.

Taking the idea of social justice a provocative step further, some ethicists are asking, why withhold from anyone the benefits of medication that would boost brain function? Should efforts toward social justice translate to ensuring equal opportunity for everyone to rise above the status quo for humanity in general? Greely and colleagues, for example, argue for making enhancements widely available while managing their risks. They write:

> We should welcome new methods of improving our brain function. In a world in which human workspans and lifespans are increasing, cognitive enhancement tools – including the pharmacological – will be increasingly useful for improved quality of life and extended work productivity, as well as to stave off normal and pathological age-related cognitive decline.[6]

Their argument parallels the case for the universal provision of education for the purpose of improving brain function and enabling human flourishing. While all would agree that education and mental wellness are desirable, there is no consensus on the preferred means toward those ends. Pharmacologic enhancement of cognitive function differs fundamentally from education in that it directly alters brain chemistry in ways that could entail incompletely known long-term risks.

Moreover, the prescribing of cognitive enhancing drugs to healthy people could potentially medicalize human intelligence, redefining those once regarded as "well" as patients in need perhaps of a brain tonic to clarify thought and strengthen memory. In marketing such drugs, it would not be difficult to persuade the public through images and anecdotes that they may be cognitively inadequate, lacking in sufficient mental energy to engage life's problems with the confidence of a calm and clear mind. Promotional appeals might suggest that nearly anyone is intellectually disadvantaged, in need of a pharmaceutical upgrade, and eligible for ever-stronger enhancements. The quest to satisfy ambitions of cognitive enhancement would prove elusive.

Distributive justice concerns the equitable allocation of limited resources. Francis Fukuyama appeals to the principle of distributive justice in expressing apprehension about a possible future society polarized between the haves and the have-nots, which he foresees as a potential danger if enhancing drugs facilitating success were available only to those who could pay for them.[9] This might be termed the positive argument from distributive justice, in which cognitive enhancing drugs, if they are beneficial, should be made available equitably. There is also what might be termed the negative argument from distributive justice, which is the central argument in this essay. The negative argument affirms that, for medicine, healing the sick represents a greater good than supplying cognitive enhancement to the well, and to redistribute limited resources in the service of the lesser good would amount to poor stewardship.

It is difficult to make a compelling case for expanding the goals of medicine to assume responsibility for making the healthy better than well when the basic medical needs of so many are unmet. Even if consumers were to pay for enhancements out-of-pocket, such use would place further demands on medical resources, including time on physicians' and nurses' calendars, diagnostic efforts to assess cognitive symptoms, the time needed for informed consent discussions, testing to monitor side effects, and medical treatment of adverse effects when they occur. Since medical resources are finite, and in some quarters scarce, their just distribution should first ensure that the medical needs of the sick are met before enlarging the healthcare industry routinely to accommodate enhancement requests from the healthy. Accordingly, enhancement medicine would all too easily become problematic from the standpoint of distributive justice.

Mitchell and colleagues offer a cautionary perspective:

> When enhancement is the sole intention of the use of biotechnology, when there is no disease present but only the desire to pursue perfection, immortality, super performance, a competitive edge, and so forth, there seems little justification for physician participation and good reasons for morally excluding it.[8]

The potential for enhancement medicine to jeopardize the availability of resources for traditional medicine would depend on how widespread the use of such drugs were to become and how intensively their health risks would require medical supervision and monitoring. Such utilization proved difficult to estimate in the case of sildenafil, which was introduced in 1998 for the treatment of erectile dysfunction, and which has also been used by many without a documented complaint or diagnosis of erectile dysfunction.[9] Despite initial fears that primary care would be overwhelmed with requests for prescriptions, demand was found to be lower than early expectations,[10] partly because of the growth of Internet-based prescribing.[11] In the case of neuropharmaceuticals, however, and particularly for drugs that stimulate the neurochemistry underlying mood or addictive behaviors, it would be difficult to monitor safety adequately over the Internet.

Initial indications of the potential demand among the healthy for cognitive enhancing drugs, while similarly difficult to predict, suggest that the potential demand may be enormous. The expanding off-label uses of modafinil, for example, now exceed 90% of prescriptions[12,13] in a market that, for this drug alone, approached $1 billion for the year 2008.[14]

Other forecasts are also relevant. Current projections foresee a coming shortage of U.S. physician supply adequate to meet the need for medical care within the next 15 years, especially for geriatric and specialist services.[15] Adding enhancement services could widen the disparity between physician supply and demand for healthcare services and exacerbate the projected physician shortage.

A further consequence of designating enhancement requests to be the proper business of healthcare professionals would be that they could become regarded as commensurate with medical needs. Proposals for healthcare rationing might then prioritize treatments and enhancements along an overlapping scale. Peter Singer has advocated that healthcare decisions be based on a quality-adjusted life-year instrument in order to compare the benefits achieved by different forms of healthcare.[16] Within that scheme, a drug that enhanced cognitive capacity for a healthy individual might be authorized and reimbursed by a third party insurer or government agency, whereas the same drug might be denied for a patient with dementia, if the estimated utilitarian increment in quality of life were judged to be greater in the first case.

The future of healthcare is now being shaped by discoveries in neuroscience, by ethical discussions regarding the wise use of biotechnology, and by developments in national policy. Within coming years, an increasing number of lifestyle drugs can be expected to reach community and Internet-based pharmacies, including more potent "smart pills" targeted to the molecular basis of specific brain functions.[17] The debate over appropriate off-label use for purposes of cognitive enhancement will likely intensify. Depending on the choices made, a possible scenario could require patients

with acute and chronic illness in need of treatment to compete for services alongside healthy individuals seeking medical expertise for personal enhancements.

Although answers to many of the ethical questions surrounding cognitive enhancing pharmaceuticals may remain unclear, the professional duty of medicine to care for the sick is indisputable. The realization of enhancement medicine would risk dividing professional loyalty by diverting attention and medical resources from the sick, to whom society has a moral obligation to ensure access to medical care.

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CLINICAL ETHICS DILEMMAS

TO DIALYZE OR NOT TO DIALYZE

ROBERT D. ORR, MD AND GREGORY W. RUTECKI, MD

Editor's note: *This column presents a problematic case that poses a medical-ethical dilemma for patients, families, and healthcare professionals. As it is based on a real case, some details have been changed in the effort to maintain patient confidentiality. The intent of this presentation is to offer ethical analysis and medical recommendations that are consistent with biblical principles. In this case, the second consultant offers further insight into the ethical discussion behind the steps in the recommendation of the ethics consultant.*

Column editor: Ferdinand D. Yates, Jr., MD, MA, Acting Consultant in Clinical Ethics, CBHD

Question

Is it mandatory to dialyze a combative patient who is a threat to himself and to others?

Case:

A comatose 64 year-old man was brought to the Emergency Room by ambulance. Someone who remained unidentified had called "911" only to say that he needed immediate dialysis. There was no family with him, and the patient's records were retrieved from a nearby hospital. His history included Type 2 Diabetes Mellitus for many years with multiple complications: end stage renal failure (Stage 5 Chronic Kidney Disease), hemodialysis dependence, bilateral above knee amputations (AKA), a previous cardiac arrest with post- resuscitation cerebral anoxia, multiple prior strokes, and heart disease with many admissions for heart failure. He had not dialyzed for nearly one month, and the dialysis unit was also contacted regarding his previous treatments at their facility. Apparently, his course had been complicated by his verbally and physically abusive behavior towards other patients, their families, as well as dialysis center staff. Although he was not disruptive in other environments, when he arrived at the dialysis unit he exhibited multiple dysfunctional and potentially dangerous behaviors. He struck and insulted people in the waiting room, he spit at nurses and dialysis technicians while on the machine, and he pulled out his needles when he was unattended. Occasionally, the bleeding from this activity was substantial and startled other patients. The unit decided to discharge him from their care and to discontinue dialysis.

After Emergency Department evaluation, he was admitted to the hospital with a critically elevated potassium level. He was dialyzed emergently one time, and his family was contacted by the primary care team and nephrologist for a conference. His divorced wife and a 28 year-old daughter comprised the patient's entire family, and neither had obtained legal decision making authority through durable power of attorney. As the patient was not competent to make his own decisions regarding his dialysis and other essential care, they were queried as to what statements, if any, the patient had made in the

past regarding future medical care. They insisted that he be chronically dialyzed despite the preceding history of abusive behavior. They said that "when he wakes up, he says that he wants to dialyze." He was temporarily dialyzed three times a week, and an Ethics Consultation was obtained to assist in decision-making.

A review of the past medical history noted that about one year ago, when the patient suffered a heart attack, he also had post-resuscitation anoxic brain injury. Prior to the episode, he did have bizarre behaviors that were primarily self-directed. (He deliberately slammed his below-the-knee amputations into the floor to the extent the bleeding necessitated that AKA be done.) Sometime after the brain injury, he began to exhibit the more violent behaviors that were threatening, dangerous, and abusive to others.

ETHICS CONSULTATION

The Ethics consultants faced a number of challenges. Since the patient could not communicate, were his former wife and his daughter appropriate surrogates? Were they acting in the patient's best interests or were they motivated by other dynamics in their efforts to continue his dialysis? Was his behavior in the previous dialysis unit appropriately documented and determined to be irreversible? Were there elements of delirium, or had the strokes and anoxic brain injuries made his behavior permanent? Should he be sedated in order to continue chronic dialysis? If not, was discontinuation of dialysis an ethical option?

The consultants decided to obtain the relevant information regarding the patient and his behavior from three sources prior to rendering their opinion: 1) the dialysis unit staff that cared for him during the preceding year, 2) the nurses and staff who cared for him during the present admission, and 3) his family. The family gave permission to review his dialysis unit records. They only cautioned the ethics consultants that one nephrologist at the unit made the decision to stop dialysis because he was frustrated with the family's behavior and that he had been rude to them.

The staff members at the unit were consistent in describing the patient's abusive behavior. Whereas it had begun prior to his cardiac arrest, they agreed that it worsened afterwards. The behavior did not seem to "wax and wane," but was persistent and potentially dangerous to the patient, other patients, and the health care team. In contrast to the family's contention, four rounding nephrologists were involved in the decision to discontinue his dialysis, not merely the one who may have been biased according to the initial family meeting. One nephrologist admitted that he could only sedate the patient on high dose, parenteral antipsychotic medications and he felt that this option was untenable for a prolonged period of time. Prior to discontinuing the patient's dialysis, the unit staff and administration held a meeting with the family. They apprised the former wife and daughter that, if a family member sat with the patient on dialysis and helped to relax him, they would try to continue his treatments. However, the family continued to "drop him off" at the unit and leave. The unit documented the meetings in writing and officially discontinued the patient's access to dialysis at their unit. Some staff members alleged that the family profited from the patient's "Social Security" income and therefore desired to have dialysis continued.

The dialysis nurses who had treated the patient at the hospital after his recent admission were asked about his behavior. Even though he dialyzed enough (four times regularly) to reach a comfortable baseline, he was verbally and physically abusive, and he

tried to pull out his needles unless he was restrained and heavily sedated. The behavior had only become worse after he "woke up" after 1 month without dialysis. No one had been able to hold a meaningful conversation with him regarding his medical treatment plan.

After obtaining this background information, the consultants met with the family and recommended no further dialysis. The consultants, primary care team, nephrologists, and nursing staff of the hospital unit unanimously agreed with that decision. The family disagreed with the decision and requested another attempt with sedation, however they were diplomatically refused.

Commentary by Robert D. Orr, MD, CM

ASSESSMENT:

This patient in chronic renal failure exhibits intolerable behavior during dialysis, and the professionals caring for him are unwilling to continue giving dialysis.

DISCUSSION:

Difficult behavior can be a complicating factor in the care of patients. If the difficult behavior occurs outside of the professional care setting (e.g., failure to follow a diabetic diet, failure to return for needed procedures), caregivers may become frustrated, but it is generally accepted that they have a responsibility to provide "rescue treatment."

If the difficult behavior occurs in the care setting, however, obligations and management options are often different. The differences depend on (a) whether the behavior is volitional, (b) the importance of the treatment, and (c) whether the behavior presents a danger to other patients, or even to the professional caregivers.

If the behavior is non-volitional and presents no danger to anyone (i.e., it is merely a matter of inconvenience or extra expense), the professional caregivers have the same obligation to provide treatment as they would for any other patient. If the behavior is volitional in a patient who has capacity, it is ethically permissible to negotiate with the patient regarding terms and limits. If forgoing the treatment presents an imminent danger to the patient, limits should probably be extended as far as possible. If that difficult behavior presents a danger to others, those terms and limits may be more stringent.

If the behavior is non-volitional (or the patient is unable to understand its consequences) and it presents a danger to other patients or to staff, management is even more difficult, especially when forgoing the treatment presents a serious danger to the patient. Efforts should be made to change the environment, to use behavior modification techniques and/or judicious sedation, or to provide close supervision, especially supervision by family or others known to the patient. Rarely, however, if these measures are not effective, it may be ethically justified for those professionals to withhold treatment from a patient in order to protect the well-being of other patients or professional staff. In those situations, especially when the treatment is life-saving, the professional caregivers should try to make alternative arrangements for treatment. If all available treatment sites have attempted treatment (or at least given serious consideration) and all are unwilling to provide the life-saving treatment, it may be ethically justified to

accept the fact that the patient is untreatable. Every effort should be made to avoid this tragic outcome.

In this case, it is reported that the patient exhibited difficult behavior only at the dialysis center. Efforts were made to calm him by having family present and by using sedation. His verbal abusiveness and actions that startled other patients are probably not adequate justification for withholding further dialysis. However, physical abuse and splattering blood might justify such action if they presented uncontrollable dangers, e.g., if he was felt to be capable of serious violence or if he carried blood-borne pathogens. The level of such risk is a judgment call that can only be made by the professionals involved.

RECOMMENDATIONS:

(1) It is ethically permissible to negotiate with this patient and his family about management options and the limits of tolerable misbehavior at this dialysis facility.
(2) If this fails, efforts should be made to transfer care to a willing facility.
(3) If no other treatment facilities are willing to take the patient, and if the patient's behavior presents unmodifiable dangers to other patients or staff, it is ethically permissible to withhold dialysis and arrange for palliative care for the patient.

Case Denouement: The patient was lost to follow-up and may have expired.

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ON CLINICAL ERRORS IN GERIATRIC MEDICAL DIAGNOSES: ETHICAL ISSUES AND POLICY IMPLICATIONS

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Errare umanum est sed perseverare est diabolicum

To err is human but to persist is diabolical.

Abstract

Today one out of six American physicians faces a malpractice suit. The prevalence of legal actions in Europe is growing, and "Defensive Medicine" is becoming an endemic phenomena. A risk-averting practice is consequently creating an "ethical dilemma" in medical circles. Physicians faced with the risk of being punished for potential diagnostic errors may restrain from complying with the professional codes imposed on them. Diagnostic error in clinical practice is a serious public health problem that the authorities must face. According to post-mortem reports, the frequency of misdiagnosis, which ranges between 30% and 40% of cases, has not decreased in recent decades. There is a correlation between misdiagnosis and increasing age; i.e. medical errors are even more common in geriatric settings. The purpose of the present review is to focus on the causes and consequences of medical errors, and on research in this area, with a view to recommending policies capable of mitigating the risk of diagnostic errors in geriatrics. Physicians are faced with "ethical dilemmas" in their professional practice, and, while some errors are unavoidable, strategies to improve medical performance need to be adjusted continuously. Formulating detailed diagnostic protocols, limiting working hours, using computerized systems, taking a more appropriate approach to the problem of diagnostic errors in medical student training, and increasing the number of necropsies performed in geriatric patients are some of the policies that might be recommended, as discussed in this paper.

Key words: ethical dilemma, legal issues, defensive medicine, policy recommendations

Introduction

Medical errors (MEs) are a serious public health problem and a burden that almost all clinicians have to bear. The exact prevalence and magnitude of MEs is unknown, but it is probably very high.[1] There is evidence of errors being under-reported.[1]When MEs occur, the reaction in the medical world is most often to try and find someone to blame and to punish them.[2] Fear and punishment produce not security, but defensiveness, secrecy, and anguish.[2] The public generally believes that a person responsible for an error that carries serious consequences should be sued, fined, and even suspended from their professions.[3]

In their professional activities, physicians face the risk of being involved in the death of a patient and of consequently being punished; this poses "ethical dilemmas". Medical practitioners have to cope with situations of conflict arising between the medical regulations and their own professional future. Proper legal safeguards must be in place to prevent the practice of "defensive medicine" (DM).

No setting is hazard-free, no medical specialty is immune, and patients are at risk no matter what their age, sex, and state of health.[1] The risk of MEs is not the same in all cases, of course. Patients who are more severely ill, who need multiple procedures, and who remain in the hospital longer (as is often the case with the elderly) are more likely to suffer severely from MEs[1]; so, it is reasonable to conclude that errors are committed more frequently in the geriatric field.

Blendon et al. conducted a survey on the possible causes of MEs.[3] The two main causes reported by physicians were understaffing of nurses in hospitals, and overwork, stress, or fatigue on the part of health professional. The top four causes of MEs considered important by the public were: physicians not spending enough time with patients; health professionals suffering from overwork, stress, or fatigue; health professionals failing to work together or communicate as a team; and understaffing of nurses in hospitals.

Sadly, diagnostic errors have received little attention in literature, especially in geriatrics, although the elderly population has been increasing in the last few decades, and MEs are becoming an "epidemic" condition. The purpose of this paper is thus to focus attention on this alarming issue, i.e.: (a) to cover the evidence, causes, and consequences of MEs, and the research on this topic; and (b) to recommend policies to mitigate the risk of MEs in geriatrics.

Background

The Ethical Dilemma

We define "misdiagnosis" as a situation in which a person is believed to have a disease that does not exist, or when a disease goes unrecognized with negative results in the patient's prognosis.[4] Despite the improved quality of diagnostic methods, the frequency of misdiagnosis has not decreased appreciably in recent years.[4] The rate of misdiagnoses detected at autopsy was about 40% between 1960 and 1970, and was still much the same in the eighties, after new technologies had become widely available.[5] Misdiagnosis rates of 30-40% are very high, and modern diagnostic technologies seem to be a double-edged sword. One explanation for the failure of misdiagnosis rates to drop over the years may be the pitfalls of correctly diagnosing diseases in elderly people.[4]

The longer life expectancy in industrial countries and the consequently higher proportion of older patients with multiple diseases or atypical conditions may contribute to the persistently high rates of diagnostic errors.[4] In fact, a correlation has been found to exist between misdiagnoses and increasing age[6], though this was not confirmed by a further study.[7] Older patients often present different, highly complex clinical scenarios, and the accuracy of clinical diagnoses reportedly declined with the increasing age of patients to such a degree that only 47% of the principal clinical diagnoses were confirmed at necropsy in 295 patients over 75 years of age.[8]

Especially in uncooperative or bedridden elderly patients, medical histories or physical examinations may lead to misdiagnoses because they are incomplete, poorly performed, or misinterpreted. Excessive reliance on laboratory test results can also cause confusion because of patients' co-morbidities.

In geriatrics, arriving at a clinical diagnosis is not always the main aim, however. Physicians tend to only treat the symptoms for which the patient was hospitalized. It is easy to make mistakes in providing said treatment because of a massive use of medication and the onset of drug interactions. Adverse effects of drugs are very common in old age, and although autopsies show that iatrogenic injuries are a frequent cause of death, approximately 90% of them are not recorded in the clinical reports.[10]

In geriatrics, there is often an ethical dilemma to face, particularly in the oncological setting: is it right to treat the symptoms but not the neoplastic disease simply because a patient is elderly? It depends on the patient's state of health, not on the specific type of disease involved. Some elderly people are frail; others are not. A comprehensive geriatric assessment enables the recognition of frailty as a condition in which most of the patient's functional reserves have been exhausted (e.g. dependence in one or more activities of daily living, three or more co morbid conditions, one or more geriatric syndromes).[11] When frail elderly people develop cancer, the aim of their treatment is palliation. On the other hand, antineoplastic therapy is utilized with elderly patients who have a chance of long-term survival.[11] As a consequence, misdiagnoses in cases of neoplastic disease have a lower impact in ethical terms if the patient is elderly and frail. What might appear to be MEs in geriatrics are often *deliberate*, to avoid the use of invasive diagnostic tools in frail, elderly patients. MEs can have a different significance depending on whether they occur in frail or healthier geriatric patients. In other terms, some errors are "foreseen", and the consequences of such MEs are not harmful to the patient.

Legal Issues

Many physicians will be sued for malpractice at some time during their careers, making a nightmare of the medical profession. According to current statistics, one out of every six American doctors will face a malpractice suit. The decision to take legal action is prompted not only by the original injury, but also by insensitive handling and poor communication after the event.[12] Since mortality is high in geriatrics, it may be that geriatricians are more likely to be sued, but very little information is available in this field. Unfortunately, litigation can sometimes be seen by relatives as a financial resource rather than as a means for "transparency." This is especially true for the field of geriatrics, in which the patients' older age naturally places them at greater risk of death due to multiple diseases.

Doctors are sued less often in Europe than in the USA, though the problem has been more serious in recent years. To illustrate, over a 20-year career period, 80% of Italian doctors can expect to be sued. The costs of malpractice insurance and lawsuits are very high in the US and in Europe, too. In addition, doctors accused of murder[13] may experience such negative emotions that they sometimes abandon the profession. Death is a common event in geriatrics, but some relatives may not be fully aware of this.

In Japan, unexpected deaths in hospitals have been increasingly suspected of resulting from malpractice.[14] Because of the lack of a proper system for receiving

complaints from patients' relatives, these situations are sometimes reported to the police[14], and nearly 700 relatives sue doctors every year.[14]

The fact remains that every time doctors are summoned to appear in court, they are bound to arrive with a sense of anxiety and fear, feelings that unavoidably result in a defensive and mistrustful attitude towards the patients and their relatives. However, in the vast majority of cases, and especially in geriatrics, MEs can actually be attributed to structural or procedural inadequacies, not to personal negligence or indifference.

Defensive Medicine

The phenomenon of Defensive Medicine (DM) - an anonymous, abstract medicine - is expanding, because of the increased risk of litigation, with potentially very severe implications for the costs and quality of healthcare. DM is prompted primarily by the threat of liability, and it reflects physicians' efforts to distance themselves from sources of legal risk.[15]

Nearly all (93%) of the physicians questioned in a recent study reported practising DM.[15] Physicians use this approach for the sake of their own and their patients' peace of mind. The most common form of DM—the prescription of costly imaging studies—seems to be merely a waste of resources, but other types of defensive behavior may restrict access to care and may even pose a risk of physical harm.[15]

Particularly in geriatrics, in which the aim is not always to arrive at a diagnosis, but rather to treat the symptoms, the recommendation of unnecessary invasive procedures can constitute a risk for patients, who often have co-morbidities. DM should be converted into Preventive Medicine; physicians who practice DM risk being sued in the future for diagnostic-therapeutic obstinacy.

Recommendations

Autopsy

There is a general conviction that necropsies are no longer necessary because antemortem diagnostics identify the main cause of death and present other clinically-significant diagnoses in the vast majority of cases.[16] This is not true. The best way to improve the accuracy of diagnoses, especially in geriatric patients[17], is to conduct an autopsy every time a patient dies. Autopsy is still considered the gold standard for diagnostic purposes. Autopsies play an important role in monitoring the quality of diagnostics in populations with increasing proportions of geriatric and obese patients with co-morbidities.[18]

Despite the acknowledged value of this postmortem procedure, hospital autopsy rates have fallen to just 10% of deaths and are declining worldwide[19,20], especially in the geriatric age group[21,22], though one recent study found that, despite a marked drop in the total autopsy rates, the numbers of geriatric autopsies is rising.[17]

Reasons for declining autopsy rates may include cost, fear of malpractice litigation, and advances in medical technology.[19] Additionally, even when an autopsy is recommended, permission is often refused by the individual's relatives due to the relatives' resistance or an inadequate approach by medical staff.[6] The most frequent reasons given for this resistance are the disfigurement of the body, the stress of

authorizing an autopsy, and the shortage of information about autopsies.[23] When it comes to geriatric patients, another reason for opposition to the procedure may be that relatives consider an autopsy to be futile when conducted on an old body.

In reality, technological advances such as the introduction of ultrasound, computerized tomography, and radionuclide scans have not, in fact, reduced the value of autopsy. We cannot always fully grasp the complex interactions at work in patients[24], particularly in the elderly, whose organs are virtually all damaged to some degree and for whom often only limited structural and functional information is available.

Autopsy remains a valuable tool for evaluating the diagnostic and therapeutic process, especially in geriatrics, because atypical disease presentations and limitations on the available diagnostic options may lead to the under-diagnosis of potentially treatable disorders.[25] "Let our ignorance of disease in old age serve as a catalyst for the renaissance of autopsy," says Westendorp.[24] Even centenarians should receive autopsies; their deaths should not be merely attributed to old age or senile debility. The majority of centenarians suffer from chronic co-morbidities even though they are considered healthy.[26]

Clinicians should request permission for necropsy routinely, including necropsy for the elderly, and not just for the cases in which they are particularly interested.[6] Clinical-pathological necropsy meetings might prove to be important to the prevention of medical errors. Even autopsy is not infallible, of course. Some diseases cannot be detected by anatomopathological examination (e.g. cardiac arrhythmia), and pathologists, like clinicians, can make mistakes.[27]

Medical Reporting

We should learn about error-reporting in our medical training and use it in our professions, but, unfortunately, the problem is not solved by simply training physicians to report MEs. In the USA, some states have mandatory reporting programs for errors that result in serious harm to patients[28], but this information is used almost exclusively to punish individual practitioners or healthcare organizations.[29]

Is it ethical not to disclose a ME? In the geriatric field, it depends. From a practical and ethical standpoint, patients in their eighties and nineties (just like younger adults) need to know about any MEs concerning them that might affect their future survival. The act of disclosing errors also upholds the physician's ethical duty to tell the truth within the physician-patient relationship that is built on trust.[30] On the other hand, there may be no ethical issue involved if a physician fails to tell a frail, elderly patient with a short life expectancy that he or she misdiagnosed their neoplastic disease. No change would be made in terms of their treatment, and the disclosure of clinically inconsequential errors to frail, elderly patients is probably unwarranted.

We must consider the question: What about us? Would we like to be treated the way we are treating our patient? Would we prefer to not be told about the ME? The interests of the patient should come first in all circumstances.

Then another issue presents itself: how can we report our errors if we are afraid of being punished? Practitioners will only report errors if this practice becomes a culturally

accepted action within the healthcare community[28] and if they feel safe in doing so. The only means to creating a voluntary reporting program is freedom from punishment.[28]

We might want to talk to someone about our mistakes, but we are afraid of the patient's anger or, worse, of a court summons and punishment. We believe that error reporting can be seen as a "liberatory confession": if we can "confess", we can avoid becoming "the second victim", as Wu said[30], suffering from a sense of guilt or remorse.

Buelow recently suggested that patients "make errors too," and they should be considered "morally" responsible for their errors.[32] They forget to do certain things, such as attending scheduled therapies, or they fail to read medication labels and instructions carefully. This can happen more frequently among elderly patients who are less able to read and/or understand medical prescriptions due to poor eyesight or cognitive decline.

Diagnostic Protocols

In the past, "common sense" was used instead of scientific data, and many experience-based and opinion-based practices proved ineffective or even harmful[33]. Currently, in times of *evidence-based medicine,* it is argued that medical decisions should be based on the firm foundations of high-grade scientific evidence, rather than on experience or opinion[33], and this approach is becoming a cornerstone of patient safety. We can combat misinterpretations by demanding duplicate independent readings of data.[33]

In addition, excessive workloads for healthcare staff should be avoided: workers cannot be expected to guarantee a reliable performance if they are sleep-deprived, or working double or triple shifts.[34] After working twenty-four hours without stopping to sleep, a healthcare worker is about as dependable as a drunkard.[35] This sort of problem is exacerbated in elderly patient care because the clinical conditions of the elderly are complex and impose a great burden of care. Placing a limit on working hours is an obvious way to reduce MEs.[33]

Computerized Diagnostics

As Leape says, "Although every new technology will inevitably introduce new forms of error, it is high time for medicine to enter the computer age."[34] Handwritten paper prescriptions and printed medical records should be a thing of the past.

The use of computerized systems has numerous benefits: data transcription and communication errors are fewer, information is always up-to-date, data are easily shared with colleagues and nurses, and a patient's clinical history is readily accessible for follow-up and later hospital stays.

With computerized systems, we can conduct statistical analyses and assess the benefits of proposed therapies. Public health costs would also drop thanks to economies on paper and time savings in the writing and reading of handwritten papers, leaving us more time to listen to our patients. When patients are discharged, we can also e-mail all the documents on the patients' hospital stay in real time to their GPs.

Medical Training

An appropriate approach to the issue of MEs might be to acknowledge the important role of training in the process by which medical students learn to consider and deal

with MEs.[36] Unfortunately, many medical school graduates are unable to cope with their errors because nothing in their training prepares them to respond appropriately to the mistakes they will inevitably make. Errors are seldom discussed, and it is assumed that competent doctors do not make mistakes.[37] Medical students and residents also show little interest in geriatrics, emphasizing the need for an innovative approach and continuous exposure to a geriatric-focused medical education.[38]

Many students have an intense emotional reaction to the idea of committing errors in patient care[39], but no psychological support is offered to medical students who express confusion and embarrassment about whether and/or how to discuss errors that have occurred. Neither is support offered to doctors when their errors harm their patients.

Training programs are needed that aim to teach undergraduate medical students a tolerance of errors.[37] The whole undergraduate curriculum could be seen as an attempt to prevent errors in clinical practice. It is uncertain whether this would improve the students' ability to cope with errors and whether such training should be offered early or late in the curriculum.[37] For example, if the issue is dealt with too early in the curriculum it could cause students to abandon their medical studies due to an unacceptable level of anxiety.

Problem-based learning is a popular teaching method and often recommended for its effectiveness in teaching problem-solving. Judging from our experience of bedside rounds, morbidity and mortality conferences, and autopsies, understanding our errors is a powerful way to learn how to correct faulty reasoning.[40]

A database can promote learning, and a course on MEs would help medical students not only learn to cope with their future mistakes, but also learn to reduce their frequency.[37] In addition, students must be facilitated in the care of elderly patients, given the demographic realities of medical practice in the 21st century.[38]

Conclusion

Clinical diagnostics is not a "perfect" science like mathematics, especially when elderly patients are involved. It is "an art with grey areas."[36] When we begin to study a case, we can suggest a hypothesis, but we need a confirmation in order to treat the patient. As diagnosis is more difficult in the elderly than in younger patients, we can make mistakes more easily. When we do, we cannot justify our behavior by the conviction that "everyone makes mistakes" or that "we did all we could". The Appendix contains a series of recommendations on how ME rates might be reduced.

Understaffing of nurses in hospitals seems to be the most significant cause of ME. This may be especially important in geriatrics because the burden of care for elderly patients is greater than for younger patients. Since errors are inevitable, strategies to improve medical performance need to be constantly adjusted. Acceptance of the fallibility of healthcare operators and error detection is a prerequisite for such strategies. We have to avoid hiding our mistakes. When the barriers of shame and punishment are removed, doctors, nurses, and pharmacists will be able to improve the reliability of healthcare, implementing the best practices or developing new ones.

Unfortunately, leading figures in the medical profession and in healthcare organizations do not include reducing MEs to solve the "ethical dilemmas" faced by

practitioners among their top priorities. To make progress on the ME issue, we need to involve all levels of leadership, especially in geriatrics. Without the commitment of professional and organizational leaders, our efforts will remain fragmentary and uncoordinated and will have only limited effects.

Appendix: Recommendations

1. Use modern technologies, evidence-based medicine, and problem-based learning in medical student education.
2. Teach students to accept responsibility for their mistakes, and motivate them to care for elderly patients.
3. Develop systems for preventing medical errors in hospitals.
4. Create a national database of errors that can be shared and updated, from which to draw recommendations on the safety of the elderly patient and the quality of the healthcare service.
5. Avoid the use of handwritten prescriptions and paper medical records by using computerized systems.
6. Communicate with colleagues of other specialties to make joint decisions on therapies, thus avoiding drug interactions, which are very common in elderly patients.
7. Establish a good link between doctors, nurses, and pharmacists, as elderly patients often have co-morbidities.
8. Establish good communications with relatives and patients, and spend enough time with them to adequately assess symptoms and signs.
9. Obtain a detailed history and perform an accurate physical examination, not relying entirely on laboratory and instrumental test findings.
10. Be aware of the limitations of the diagnostic methods applied.
11. Have duplicate independent readings of X-rays, ECGs, angiograms, and histological specimens.
12. Use error reporting to learn from past errors.
13. Increase the necropsy rate in geriatrics (including centenarians) to produce a higher rate of confirmation of clinical diagnoses.
14. Improve the approach to obtaining consent to autopsy from relatives, even if they resist the idea because the patient is elderly.
15. Create voluntary (non-punishing) error reporting programs with a view to obtaining reliable data on medical errors.
16. Create medical codes for errors.
17. Involve leaders in the medical profession and healthcare organizations by means of open discussions.
18. Accept the fact that we are human and not infallible (a dose of humility is needed), and that we cannot work “miracles” in the geriatric age group.

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AN ETHICAL ANALYSIS OF PROFESSIONAL CODES IN HEALTH AND MEDICAL CARE

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Introduction

The purpose of this analysis is to present a contextual discussion of the evolution of healthcare ethics utilizing relevant examples of historical and contemporary ethical issues in the healthcare system. We begin by providing a general overview of the conceptualization of the necessity for ethical considerations in healthcare services. We then examine the evolution of healthcare ethics – including leading philosophers and bioethicists – while offering a critical discussion of some of the most pressing ethical challenges faced by the health professions. Additionally, this analysis includes a timely discussion of the most influential ethical codes guiding the actions of various health professions, including the American Medical Association (AMA), American Society of Public Administrators (ASPA), World Medical Association (WMA), Health Informatics Professionals, and the Hippocratic Oath. In order to demonstrate the link between ethical theory and practice, an in-depth discussion of the values of healthcare professionals – coupled with a detailed ethical decision-making model for healthcare professions – is presented. This discussion and proposed model serve as a practical guide for ethical decision-making in the healthcare context. We conclude our analysis with a comprehensive summary of ethical findings presented throughout this paper, along with recommendations for future ethical considerations.

Literature Review

General Overview

Since the 1940s, the intensity of ethical discussions has escalated to coincide with the rapid innovations in technology and medicine (Breen et al., 2008b), as well as the implications and consequences of public policy (Darr, 1993; Liebler & McConnell, 2008). Historical ethical discussions surrounding issues of abortion and euthanasia are now juxtaposed to new concerns such as those surrounding human cloning, stem cell research, provider selective participation in health plans, and quality of care for minorities. Technologies, such as in vitro fertilization, euthanasia, and more recently, human cloning and electronic medical records, have guided ethical discussions as society has sought to determine allowable ethical practices that positively advance the society. Similarly, medical advances in pharmaceutical sciences and alternative therapies have fueled comparable ethical discussions in particular relationships between providers and the pharmaceutical companies, representation of vulnerable groups in health services research, financial incentives, and the cost of healthcare to individuals and third-party payers. On the other front, public policy makers face a myriad of ethical considerations

as they delve into discussions such as those related to cost, quality, and access. The most significant of these discussions centers on issues including: 1) whether the United States Constitution supports the assertion that healthcare is an individual right; 2) the persistent, inferior health statuses of racial and ethnic minorities; and 3) the safety and security of Protected Health Information (PHI).

While medicine and technology have enhanced the society's ability to sustain, improve, and manufacture life, public policy must work concurrently to ensure that ethical standards are not compromised, and that issues affecting social injustices are appropriately addressed. While implementing ethical decision-making models into various aspects of health, considerations should inherently and extrinsically include both individual and collective ethics and values. Individuals – as well as organizations – serve as moral agents, in that actions undertaken by either are not devoid of values. In carrying out their duties, healthcare providers and administrators must be guided by the founding principles of beneficence, non-malfeasance, respect for others, and justice (Darr, 1993), along with a comprehensive moral framework to guide their actions as they seek to appropriately prioritize the rights of their patients over external factors, and while ensuring the delivery of healthcare services to the public in a manner that is not only fair and ethical, but also just.

History of Healthcare Ethics

Health is a very common concern of humans and goes far beyond physical well-being (Ashley & O'Rourke, 1994). In order to have an understanding of how healthcare ethical values influence medical practitioners and patients, this analysis illustrates the development of healthcare ethics, starting from the primitive time when humans perceived that disease originated or emanated from misbehavior, to the role of religious practice, and the paradigm shift in Hippocratic medicine. The technological improvements in the modern world have altered certain aspects with regard to physicians' obligations. Therefore, the modern medical codes of ethics were created and have become a dominant form of professional ethics today.

Primitive Medicine

Medicine, philosophy, and religious practices originate from the mass of primitive beliefs and taboos that humans in early generations attempted to understand and manipulate beyond their comprehension and abilities. Trying to cope with diseases, "Medicine Men", or shamans, were temperamentally equipped to deal with these mysteries and developed a series of elaborate rituals and customs to propitiate the unseen powers (Loewy, 1996). The basic ethical question in primitive medicine involves what a man ought to do and what he can do. Shamans had to make judgments based on a system of values or a set of moral problems and administer the treatments (types of psychotherapy through the rituals and customs) (Loewy, 1996). Shamans are still in existence today, practicing natural health and providing treatment to people in many third-world countries.

Pre-Hippocratic Ethics

According to Loewy (1996), the development of ethics in the pre-Hippocratic world includes several different aspects of medical practice. In Babylonia, the Code of

Hammurabi (around 1727 B.C.) represented the attempt to regulate medicine and protect patients from incompetent practitioners. In Egypt, physicians are regulated to a rigidly prescribed regimen. However, Aristotle stated those physicians were allowed to change treatment if the traditional approach had been found ineffective after the fourth day. Persian medical ethics spoke of the attributes of the good physician, which is similar in many ways to modern-day medical ethics (Loewy, 1996).

Hippocratic Medicine

Unlike their Babylonian and Egyptian colleagues, Greek physicians were quite unfettered by state regulations. The purpose of medicine was the application of knowledge to the treatment of disease. During the middle stage of his life, Hippocrates developed the first scientific medical paradigm, led the medical field's independence from religion and philosophical speculation, and devised an original code regarding medical ethics. Although the common method of healing the ill was to deliver them to a sacred temple for supplication to Aesculapius, the god of medicine (Stern, 2005; Sykiotis, Kalliolias, & Papavassiliou, 2005), Hippocrates conceded that pathology generated from natural sources. In addition, Hippocrates believed that the human body, with its inherent immune system, could recover on its own, leading to healing and eventual, restored normalcy. His direct observations of pathological symptoms, and the simultaneous development of disease, enabled him to describe many of today's commonly known maladies, such as pneumonia, arthritis, and malaria. Hippocrates exhorted like-minded physicians to strive to ensure the restoration of the sick, and that physicians should be honorable in their practice (O'Neil, 2006).

The Hippocratic Oath is a sacred vow that has been both historically and traditionally pledged by physicians with respect to their ethical practice of medicine (Goldberg, 2006; Stern, 2005). The Hippocratic Oath was initially intended to prohibit physicians from participating in abortions and surgical procedures in which knowledge of the surgical practice itself was unfamiliar. In contemporary society, physicians pledge to a reformed version of the oath as a necessary and legal part of graduating from medical school (O'Neil, 2006). Essentially, the oath stipulates that novice physicians swear to strictly practice and uphold professional ethical standards. The most prominent element to this oath, in today's practice, is to avoid committing harm to patients.

The influence of Hippocratic prescriptions and proscriptions still shapes the professional values of contemporary Western medicine. The values represent physicians' understandings of Hippocratic medicine developed through their professional culture, education, and experience (Bulger & Barbato, 2000). However, the ethics developed in the oath later raised some questions about health professions, that is, whether it seeks to benefit patients or professional institutions (Loewy, 1996).

The Medieval Times and Middle Ages

The Hippocratic corpus had influenced Scribonius Largus (2-52 CE), who viewed medicine as a "profession" containing a fundamental core of ethics. Scribonius regarded humaneness, friendliness, and philanthropy as the special obligations of physicians. Furthermore, physicians can harm no one, and must treat friend and foe alike (Loewy, 1996). However, Galen (131-201 CE) believed that a true physician practices medicine out of no intrinsic connections, and thus, is expected to be a technical expert in medicine

and use his skill to the best of his ability. In the medieval and early modern times, the Arab-Jewish philosopher, Maimonides, wrote an oath stemming from Scribonius's perspective, while Galen's influence permeated the Medieval period. These views were adopted by the Church; the Christian's point-of-view that physicians are an instrument of God in opposing disease, pain, and death has persisted and remains salient in medical thought and practice to the present day. In short, physicians are expected to be charitable and competent (Loewy, 1996).

Modern Medical Ethics

The enlightenment of the 17th and 18th centuries emphasized human reason. According to Loewy (1996), physicians in modern times have to pursue what are essentially moral ends by more complicated technical means and apply these means to their patients in "Newtonian" fashion. As a result, medicine has lost some of the warmer social aspects of its previous functions. Then, the dialectic between morality and the development of technology emerged. In 1794, Thomas Percival (1740 – 1804), influenced by the Hippocratic Oath, published the first code of ethics for physicians and surgeons, and the expanded version, Medical Ethics, was published in 1803. His code influenced the medical field in the United States when the Boston Medical Society adopted the code in 1808. By the beginning of the 20th century, his code had become the dominant form of professional ethics in the United States (Baker, 1999).

Classic Issues of Healthcare Ethics

Many of the historical issues of healthcare ethics and social justice have been used as case studies as methods to generally improve the guidelines for ethical judgment and decision-making. These issues have made a series of important contributions to medical assessment in contemporary society.

Death and Dying

The case of Karen Quinlan is one of the most significant "death and dying" issues in modern-day American ethics (Devettere, 1995). Karen was brought, in an unconscious state, to a hospital and diagnosed with a pathology known as a "Persistent Vegetative State" (PVS). Since she was kept alive by a respirator/ventilator and displayed no improvement for several months, her parents finally requested to discontinue the active care and allow her to die. However, the hospital refused to execute this request; the family then reacted by resorting the case into a heated, legal battle. Although Karen was removed from the active care support, she subsisted in a comatose state for several years, eventually dying of pneumonia in 1986 (Devettere, 1995; Pence, 2000). This case, or issue, has raised ethical considerations regarding the right of competent patients to refuse medical life support.

Another similar case is the one that involved Nancy Cruzan, a woman who suffered PVS as a result of a car accident that occurred in 1983. She remained in this PVS condition for seven years, and was primarily kept alive by an invasive feeding tube (Pence, 2000). Her parents also sought permission, using legal maneuvers in court, to disconnect the tube. The key question raised by the defending attorney, William Colby, concerned the definition and moral validity of euthanasia (the practice of terminating life of a hopelessly ill person). The effects that these cases have had (that is, those of Karen

and Nancy) have led to the establishment of the Uniform Brain Death Act (UBDA), a standard of neurological – or cerebrum and cerebellum – death. At the present moment, state health officials and bureaucrats have the ability to render life-and-death decisions in PVS cases (Pence, 2000).

The Beginning of Life

Assisted reproduction (AR) has raised many ethical issues about whether and how children should be created (Pence, 2000). One of the most famous cases is the birth of Louise Brown; the first "test tube baby" via in vitro fertilization (IVF) in 1978 (Devettere, 1995). Many ethical philosophers have argued that the first case of IVF was probably unethical when considering the moral right to endanger a child; there was no expressed or implied guarantee that Louse would be born normal. Consequently, the two concepts of harm are defined: 1) baseline – a notion that views that someone who does not yet exist cannot be harmed and 2) normality – a notion that it is wrong to take risks with a future person's intelligence or health (Pence, 2000).

Another classic issue which has been debated for generations is the act of embryonic or fetal abortion. Pence (2000) asserts that legal abortion has been used as a way to improve the economic status of poor women and couples for generations. However, in the case of Jane Roe, she decided that she wanted to undergo a legal abortion based on a fabricated story that she had been raped and that the pregnancy was forced and unwanted. At the time, Texas law only permitted the use of abortion in an effort to save the life of the mother. Jane Roe and pro-abortion activists and lobbyists exploited her case as a means to legalize abortion; they won.

Research and Experimental Treatment

The Tuskegee experiment, or case study, is well-known for its perceived use of humans as laboratory animals. Three hundred and ninety-nine poor and mostly illiterate black men in the late stage of syphilis were enrolled in the experimental program conducted between 1932 and 1972. However, this experiment was what has been referred to as a "no-treatment" study. The patients were not informed about what disease they were suffering and were left to degenerate with the progress of the symptoms. There are currently only eight remaining survivors from the disease and related complications (Peerson Education, 2007). This case brings the issue of racism, informed consent, and harm to subjects as ethical considerations and concerns (Pence, 2000).

Individual Rights and the Public Good

Joyce Brown, a mentally ill homeless person, defeated New York City's efforts to send her into a psychiatric treatment program. Her court-appointed psychiatrist had found that she suffered from a serious mental illness and that she would benefit most from in-patient, supervisory treatment. This case then raised an argument of suffering and commitment. Furthermore, what has been brought into question is whether a mentally ill patient has life and liberty to choose, or, if a mentally ill patient suffers from true, internal pain or some other kind of non-specified, legitimate pain (Pence, 2000).

Contemporary Issues of Healthcare Ethics

The scope of healthcare ethics embraces numerous historical and contemporary issues. In the era of technological advancement and cultural diversity, the cases of ethical dilemmas are more complicated. Our analysis presents some significant issues in healthcare ethics, including health disparities and AIDS, both of which raise the awareness of how the healthcare system and practitioners are "expected to be" with patients.

Health Disparities

Since the early 1940s, the United States has recognized that minorities have faced different health outcomes than their non-minority counterparts (Myrdal, 1996). In fact, Mays, Cochran, and Barnes (2007) reported that the health outcomes of minorities in 1990 were comparable to those of the health outcomes of the non-minorities in the 1920s. This report highlights the fact that the health outcomes of African-American males living in an inner-city region of the United States were worse than those of males living in Bangladesh, one of the world's most impoverished countries (Mays, Cochran, & Barnes, 2007). Since that time, voluminous reports demonstrating disparities in rates of morbidity, mortality, disease, and injury have shown that the health outcomes of racial and ethnic minorities are persistently worse than those of the non-minority groups in several major categories (Smedley, Stith, & Nelson, 2003). Individuals of ill or poor health are afforded less opportunity for social and economic prosperity, which, in effect, reduces their quality of life. Thus, a social justice issue arises as equality of opportunity is denied when a fair and equitable healthcare system is not established for the provision of healthcare to those with the greatest needs (Smedley, Stith, & Nelson, 2003).

AIDS

The first case of Acquired Immune Deficiency Syndrome (AIDS) appeared in the literature in 1981. Its epidemic is considered to be the deadliest epidemic in human history with an estimation of more than 21 million people having already died from the disease (Pozgar, 2005). Numerous ethical and legal issues pertaining to AIDS are still under consideration as the right to privacy and individual rights are considered. According to Pozgar (2005), a significant AIDS issue is confidentiality. Since AIDS patients may be stigmatized due to the life-threatening disease, the information regarding a patient with a HIV-positive status must be kept confidential and should be shared with other healthcare practitioners only when "essential". The issue of confidentiality is also a concern for disclosure of HIV-positive healthcare professionals. Even though no case of physician-to-patient transmission has ever been reported, many people are concerned about possible HIV infection in their physicians. Loewy (1996) stated that if physicians were forced to reveal their HIV status to their institutions or patients, their ability to have a successful and satisfying practice would be "severely limited" (p. 141); this conclusion is based on the potential prejudice that might be made against physicians.

Theoretical Approaches on Healthcare Ethics and Social Justice

Healthcare ethics is based on moral principles developed from various ethical theories. There are various definitions of ethics, but they all share similar features (Devettre, 1995). According to Devettre (1995), ethics is concerned with what we choose to do intentionally with the recognition that the choices are implied to be either good or bad; thus, we have to determine what principle is our duty to follow. Ethics, in general terms, is normative in the sense that it originates from beliefs, values, and a way of reasoning.

The development of ethical theories has existed since the teaching of the major ancient Greek philosophers: Socrates, Plato, and Aristotle. The Greek philosophers' virtue ethics emphasizes acquiring good traits of character. The implication of this view for medical ethics is that moral inquiry must ask "what a good physician should do" (Pence, 2000). Many aspects of Aristotelianism were synthesized by Thomas Aquinas, who made the connection between God and natural laws of the world. Natural Law Theory noted that humans should act morally according to God's rules. Under these criteria, *in vitro* fertilization and homosexuality would be considered unethical (Devettre, 1995; Pence, 2000). Later, many ethicists moved away from the divine law or natural law claims, eventually creating several new approaches (Pence, 2000). One of the major approaches is Natural Rights; this approach follows Thomas Hobbes and John Locke's political philosophies. People are thought to have natural or human rights, chiefly in their rights to life, to choose, and to die. If a person has a right to healthcare, the theory obliges someone to provide it (Devettre, 1995). John Rawls proposed the theory of "Justice as Fairness", entailing that every citizen should have equal access to medical care unless unequal access favors the poor. Rawlsian justice attempts to reduce the natural inequalities. Accordingly, children with genetic diseases deserve good medical care as a matter of justice, even though their care may consume a large share of resources in hospital systems (Pence, 2000).

Another relevant approach is utilitarianism, proposed by Jeremy Bentham and John Stuart Mill. The utilitarian perspective sees that moral obligation arises from what will benefit the most people (Devettre, 1995). This teleological theory promotes the well-being of the majority; however, the utilitarian perspective can be used to justify some ambiguous practices (Ashley & O'Rourke, 1994), such as permitting the sacrifice of an innocent, healthy person to transferring his organs to four patients, with the assertive claim that four people alive is better than one person dead (Pence, 2000). The 18th century philosopher, Immanuel Kant, insisted that the proposed moral law for oneself must be universally desirable. As an example of a deontological theory which obliges us to avoid certain actions without exception, the "Autonomous Moral Law" requires individuals to make informed, unforced decisions (Devettre, 1995). The Kantian autonomy perspective has established the principles of respect for the right to self-determination (Savelescu, 2007). In a medical context, this belief is the basis of informed consent. Kantian autonomy allows patients to have rights either to consent to or refuse medical treatment. According to Aulisio, Arnold, and Youngner (2000), healthcare providers, as well as patients and families, are routinely confronted with various ethical questions that encompass such issues as patient autonomy, informed consent, competence, rights of conscience, medical futility, resource allocation, confidentiality, and surrogate decision-making. More importantly, a patient's decision raises the question of whether that

individual is competent or incompetent, and whether that person is sufficiently informed of the consequences of the optional decisions (Savelescu, 2007).

Nevertheless, currently available ethical theories fall short in covering or explaining the complex problems that exist – and oftentimes run rampant – in the healthcare industry (Jaeger, 2001). Jaeger (2001) defines moral sensitivity as "openness to the differences that can exist between people involved in a particular decision-making situation, and it depends on both an understanding and respect for the complexity of meaningfulness in human life" (p. 139). Moral sensitivity goes beyond understanding what others are feeling or experiencing. Being ethical requires that people comprehend and appreciate that they may not share the same value systems as others. Jaeger (2001) recommends that healthcare facilities should include administrative systems that create environments that motivate workers to be both ethical and accountable.

Modern philosophers consider a combination of three theories of well-being, including "Mental" state theories, "Desire" fulfillment theories, and "Objective" list theories (Savulescu, 2007). Mental state or hedonistic theories view happiness and pleasure as the only intrinsic good, and unhappiness or pain as the only intrinsic bad. Sidgwick (1963) defines subjective hedonism as the way an individual determines one's own pleasure as a feeling comprehended as desirable or preferable. Desire fulfillment theories see well-being as consisting of having one's desires fulfilled (Savulescu, 2007); this kind of theory gives weight to individual values and accounts for the plurality of values. The third theories of well-being represent the Objective list theories; these theories see certain things as being good or bad for a person and whether or not they are desired (Savulescu, 2007). The implications of these three theories can aid in understanding situations that involve patients who refuse certain medical treatments based on their own, or subjective, good reasons.

Empirical Research on Healthcare Ethics and Social Justice

The study of ethics in the healthcare industry often focuses on issues that arise in medical and clinical settings, including crucial topics such as medical research, patient autonomy and care, patient healthcare, and professional relationships (Werhane & Rorty, 2000). The study of patient care and treatment is one of the most relevant topics for empirical research on healthcare ethics. The delicate and crucial relationships that doctors and patients share are based on a mutually agreeable understanding regarding their purpose(s) within the clinical interaction. Essentially, the purpose of, or outcome expected within, this type of healthcare interaction is to achieve an effective and realistic medical result— that is, to manage and ensure the welfare of the patient (Breen et al., in press). In a study of attitudes of patients and nurses towards diarrhea during enteral tube feeding (ETF), Majid, Emery, and Whelan (2008) conducted a survey of 22 patients receiving ETF and 57 nurses caring for patients receiving ETF. Seven unpleasant characteristics of the diarrhea were rated based on their unpleasantness levels. The study found that patients have unpleasant feelings with fecal incontinence and frequency in ETF, while nurses rated odor and changing underwear as unpleasant. The study proposed that these unpleasant characteristics should be monitored by health practitioners and strategies should be developed to minimize these occurrences in patients receiving ETF.

Another empirical, clinical research study was conducted to measure the harm of the expansion of "Milan" criteria for liver transplantation by using the base-case analysis. The research concludes that the expansion of Milan criteria requires the demonstration of high survival rates approximately at 61% at five years after transplantation in newly eligible patients. The more aggressive approach to transplantation may be justified in the region with less severe organ shortage (Volk, Vijan, & Marrero, 2008).

Long-term care is also a current debate in the healthcare ethics field. Heinrich (2007) explored the relevance of justice of long-term care on the basis of demographic and economic data in the United States and Germany. Using a theological approach, the author mapped a justice debate by John Rawls (representing U.S.-based perspectives) and Robert Nozick (representing German perspectives) to identify the fundamental assumptions in the two theories. Heinrich (2007) also explored the biblical concepts of "options for the poor" and "ecumenical social teaching from below". The study found that the U.S. model has Christian aspects for a long-term care system that guarantees an acceptable standard of care to every citizen; the German model is presented as one possible option for putting this ethical guideline into political practice.

Another qualitative research study is an exploration of suicide in suicidology academe and the corresponding legal position. Cutcliffe and Links (2008) found that academe in most of developed Western countries believe that individuals own their own bodies, yet the contemporary healthcare policy and associated practice position do not reflect this view. The author also found that relevant theoretical and ethical literature suggests that, under certain conditions, suicide may be a right thing to do (Cutcliffe & Links, 2008).

In the field of AIDS and informed consent, Iain (2007) considers the impact of research regulation on the duty of physicians to help reduce uncertainties about the effects of AIDS treatment. Iain (2007) noted "the double-standard in informed consent to treatment within and outside of controlled trials, and the failure of research regulators to use their powers to reduce unnecessary research and promote full publication of necessary research" (p. 395). Then, he proposed that this problem should be addressed by more thoughtful ethical analyses and more effective protection of patients' interests (Iain, 2007). The general consensus regarding the foremost professional purposes of the healthcare industry is that this sector is designed to provide devoted services to parts of society that require various types of medical attention, to secure and maintain the overall health of those who are otherwise fit, and to protect important healthcare values necessary to set the standard for the profession (Emanuel, 2000). Healthcare professions and professionals inherently expect out of their associates the traits of trustworthiness, accountability, personal integrity, and outstanding expertise (Emanuel, 2000).

Legal and Ethical Codes in Healthcare

Healthcare professions are governed by numerous statutes, legislation, regulations, licensure requirements, and professional codes of ethical conduct (Breen et al., 2008a, 2008b). Contrary to legal mandates, which establish necessary minimums of healthcare services, ethical codes seek to hold providers to a higher moral obligation in serving the public, or at least serve as a guide for ethical actions (Darr, 1993; Erikkson, Hoglund, & Helgesson, 2008). Although ethical codes have no legal precedence, they can be

enforced through professional standards established by various state and national boards and medical societies (AMA, 2007). For example, physicians can face severe economic and personal consequences as a result of ethical violations (Wing, 1999). Given the complexities of law and ethics, individuals participating in the healthcare system must be fully aware of the rules and laws of their professions, as well as the ethical standards for participation in the various disciplines (Beauchamp & Childress, 2001).

In addition to the fundamental principles and the Hippocratic Oath, healthcare providers often benefit from the participation in medical associations or societies which reflect their own ethical standards. On an international front, the World Medical Association International Code of Medical Conduct, first adopted by the 3rd General Assembly, and most recently amended in 2006, outlines general duties of physicians, duties of physicians to patients, and duties of physicians to colleagues. More specifically, the code calls for physicians to maintain the highest standards of personal conduct, respect patients' rights and preferences, respect human life, act in the patient's best interest, behave in a manner that he/she would want others to behave towards him/her, as well as other demonstrations of respect and consideration. The WMA Code includes the Declaration of Geneva pledge which reads as follows:

> AT THE TIME OF BEING ADMITTED AS A MEMBER OF THE MEDICAL PROFESSION:
>
> I solemnly pledge to consecrate my life to the service of humanity;
>
> I will give to my teachers the respect and gratitude that is their due;
>
> I will practice my profession with conscience and dignity;
>
> The health of my patient will be my first consideration;
>
> I will respect the secrets that are confided in me, even after the patient has died;
>
> I will maintain by all the means in my power, the honor and the noble traditions of the medical profession;
>
> My colleagues will be my sisters and brothers;
>
> I will not permit considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, sexual orientation, social standing or any other factor to intervene between my duty and my patient;
>
> I will maintain the utmost respect for human life;
>
> I will not use my medical knowledge to violate human rights and civil liberties, even under threat;
>
> I make these promises solemnly, freely and upon my honor (WMA, 2006, p. 3).

The most prominent association for physicians in the United States is the American Medical Association (AMA), whose threefold mission promotes health, the field of medicine, and public health (AMA, 2008). In 2001, the AMA revised its core principles to include the responsibility of physicians in public health and advocating access to healthcare for everyone. The AMA (2006) set forth the principles of medical ethics as follows:

A physician shall be dedicated to providing competent medical care, with compassion and respect for human dignity and rights;

A physician shall uphold the standards of professionalism, be honest in all professional interactions, and strive to report physicians deficient in character or competence, or engaging in fraud or deception, to appropriate entities;

A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient;

A physician shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences and privacy within the constraints of the law;

A physician shall continue to study, apply, and advance scientific knowledge, maintain a commitment to medical education, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated;

A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care;

A physician shall recognize a responsibility to participate in activities contributing to the improvement of the community and the betterment of public health;

A physician shall, while caring for a patient, regard responsibility to the patient as paramount; and

A physician shall support access to medical care for all people.

Although the aforementioned codes exclusively govern ethical considerations for physicians, other professional codes are applicable to specific disciplines, including nursing, public administration, and health informatics.

The actions of nurses are guided by the ethical code established by the American Nurses Association (ANA), which includes principles such as the provision of services respecting human dignity and rights, and responsibility and accountability in nursing judgment and actions (ANA, 1985). Additionally, the Code of Ethics for Health Informatics (IMIA, 2008) professionals combines the general principles of autonomy, beneficence, equality and justice, non-malfeasance, impossibility, and integrity; it is also coupled with the general principles of informatics ethics, which include information privacy and disposition, openness, security, access, legitimate infringement, least intrusive alternative, and accountability.

When it comes to ethics in healthcare, public administrators are on the forefront in regards to ethical conduct and policies. Yet, the practical application of an ethical standard for public administrators serving in thousands of capacities within government is challenging, by any stretch of the imagination. However, ethical standards for public servants are established in the Bill of Rights and the United States Constitution, and other guiding ethical practices can be found in the Code of Official Conduct for senators and members of the House of Representatives, as well as within the American Society

for Public Administration (ASPA) (Cohen & Eimicke, 1995). The code of ethics put forth by the ASPA asserts that professional administrators must provide services in the public interest, demonstrate respect for the constitution and law, maintain personal integrity, promote ethical organizations, and demonstrate professional excellence (ASPA, 2006).

Although these various codes of ethics serve as a framework for ethical practice, consideration for legal requirements must be demonstrated by all healthcare professionals in "litigious" societies. Providers can be charged with civil violations including those classified as intentional torts (e.g., assault, battery, false imprisonment, etc.), quasi-intentional torts (e.g., injuries related to personal economics, privacy issues, defamation, etc.), and unintentional (e.g., negligence, malpractice, etc.) (Wing, 1999). A good example of a civil law violation in clinical practice is when physicians are charged for assault or battery for performing medical procedures on patients without having informed consent (Paterick, Carson, Allen, Paterick, 2008). Over the years, congressional action has sought to address the vulnerability of the healthcare system by addressing tort reform and healthcare spending. These actions have been taken to support the healthcare industry by protecting providers from frivolous claims and lowering the costs associated with malpractice (CBO, 2006). Examples include capping the amount paid out for punitive damages, attorney's fees, and non-economic damages. In contrast, federal and state laws have also sought to provide legislation to ensure that the interests of the public are protected. Some of the most important acts related to healthcare include: Consolidated Omnibus Reconciliation Act (COBRA), Health Insurance Portability and Accountability Act (HIPAA), Newborns' and Mothers' Health Protection Act, Title VI of the Civil Rights Act, the Hill Burton Act, Medicare (Title XVIII) and Medicaid (Title XIX).

Medicare (Title XVIII)

Seeking to regulate and control costs while simultaneously aiming to broaden access of medical services to the most vulnerable members of the population represents the purpose of the Medicare and Social Security Act's "Title XVIII" (Medicare Act, 1965; Social Security Act, 1965). This act was instituted and enforced beginning in 1965 to extend care to those who required healthcare services the most (Mustacchi & Krevans, 2001). Further, Title XVIII marked a national health insurance program intended to serve the medical needs of elderly and disabled individuals. Even though health insurance in general is offered and accessible to people who are already insured, and although income status has no bearing on benefits (Mustacchi & Krevans, 2001), Title XVIII made it possible for payroll taxes to cover hospital insurance and monies from general revenues, and for beneficiary premiums to cover the expenses for supplementary health insurance (Medicare Act, 1965; Social Security Act, 1965). Naturally, this act, and the scope of Title XVIII, characterized a significant undertaking for the government, as offering or making available such benefits was unheard of previously. To launch the services entailed in the program, the federal government had to make a full-fledged capitalization on the capacity and experience of what was already existent within America's health insurance organizations, both public and private (Medicare Act, 1965; Social Security Act, 1965). The insurance companies would be held responsible for ascertaining and dispensing the correct amounts due for medical services paid for by Medicare (Mustacchi & Krevans, 2001).

Medicaid (Title XIX)

Medicaid, classified under Title XIX, and part of the Social Security Act, offers federal provisions and monetary aid to individual states operating approved, health-assistance policies to patients (Rosenbaum, 2002). As opposed to the eligibility criteria for Medicare, individuals entitled or qualified for this form of Medicaid must satisfy specific financial criteria in order to join. Medicaid is also a legal right. Although Title XIX is federally supported, it is ultimately run and managed by individual states and supplies health benefits to low-income individuals who need medical care and who qualify for welfare cash payments. Common recipients are the elderly, blind, disabled, and single-parent families with dependent children (Rosenbaum, 2002).

Values in Healthcare Ethics

The purpose of values in healthcare is not to address dilemmas in conflicting ethical situations. Rather, the primary purpose of values is to serve as a basis to grasp an understanding of the conflicting situations. Conflict can arise between healthcare providers, patients, family members, and related others. Oftentimes, these conflicts are not between what is ethically right or wrong, or between what is ethically good or bad. The conflicts are usually, according to Terry (1993), between competing ethically good or right values. Organizations and professional associations usually provide clear guidelines on how to handle such situations. Below are sections that list the most commonly referenced values in healthcare ethics.

Accountability

A basic and fundamental ethical concept in healthcare settings is accountability. According to Emanuel (2000), accountability refers to a rendering of account for responsibilities entailed by the job assumed. The purpose of this sort of accountability seeks to help identify and provide rationalization, feedback, and amendments to the appropriate parties. Accountability also inherently implies a kind of reciprocity between those who are accountable and those to whom accountability is held. What holds worthwhile merit in mentioning is that accountability is a two-way relationship— that is, not a single entity is without some sort of accountability. In a similar vein, each entity must responsibly strive to hold others accountable for their actions. It is important to recognize that, in this case, accountability is not intended to be solely applied for punitive reasons; such accountability also serves as an inherent constituent of the occupation itself. In various healthcare settings, such reciprocity of accountability can be found in relationships between physicians, patients, nurses, pharmacists, clinics, hospitals, employers, insurance companies, government agencies, and the general public (Emanuel, 2000).

Beneficence

The Merriam-Webster online dictionary (2008) defines beneficence as "doing or producing good; especially performing acts of kindness and charity." It is one of the basic medical ethical values which recognizes that there is a general obligation to protect individuals from harm and to ensure their welfare. Beneficence is strongly tied to the utilitarian theory of ethics, which advocates that the largest possible balance of pleasure over pain, or the greatest happiness of the greatest number, should be the aim of an action

(Merriam-Webster, 2008). Providers have a moral obligation to do good, as well as an obligation to determine the just distribution of those actions (Richman, 2005). Although beneficence as an ethical concept does not specifically instruct providers how to act, it is a virtuous concept that serves as a catalyst in the development of a moral framework on which healthcare providers can make ethically balanced decisions.

Non-malfeasance

As an ethical tenet, non-malfeasance is a founding healthcare concept extrapolated from the Hippocratic Oath, which means to do no harm (Baldor, 2003). In healthcare ethics, not to do harm is understood to mean any research or practice – such as surveys, vaccinations, and test procedures – is generally expected to do more good than harm to the public. In a patient-doctor relationship, any treatment to the patients should result in more benefit than harm. For the most part, the "do-not-harm" moral value is enforced by administrative legislation and professional codes of ethics. For instance, if a product from a manufacturer is introduced into a market, and consumers are harmed, then it is considered a breach of non-malfeasance. The harm could have been avoided if more rigorous tests were undertaken before the introduction of the product. Another example: currently the leading cause of death for young people in America is a traffic accident. If someone drives after consuming too much alcohol, the intoxicated individual is putting others into harm's way, and that individual is treated by the law as doing such, even if no harm was intended or occurred.

Autonomy

Stirrat and Gill (2005) define patient autonomy as "the provision of sufficient and understandable information and space for patients, who have the capacity to make a settled choice about medical interventions on themselves, to do so responsibly in a manner considerate to others" (p. 127). Autonomy also refers to the fact that there is trust between the patient and the physician that each one of them will make the right choice. What is evident here is that trust implies we are not certain about the outcomes of our actions. In fact, that is why we need trust, because we cannot be certain about our future actions or the actions of other people. Thus, the doctor- patient relationship works only if the doctor and the patient trust the decisions of each other. Interestingly, it is patients who are relatively well that make more autonomous decisions than patients who are seriously ill. In general, the doctor-patient relationship is described as a "conventional relationship" where there is a mutual unspoken understanding of the duties and obligations of each other (Stirrat & Gill, 2005).

Justice

With respect to health, justice refers to a situation where scarce health resources are distributed based on certain principles; principles of equal distribution. John Rawls (1971), one of the most regarded voices in social justice, posited two principles of justice to configure societies: 1) equal liberty [which states that each individual has the right comparable to all] and 2) difference [the greatest benefit of the least advantaged individuals should be given priority in dealing with social and economic inequalities]. Specifically in healthcare settings, Cookson and Dolan (2000) identify three principles of justice: 1) need principles, 2) maximizing principles, and 3) egalitarian principles.

Need principles – the most widely discussed principle – refer to the proportional distribution of healthcare based on "need." Maximizing principles aim to maximize or optimize healthcare benefits. Egalitarian principles seek to reduce inequalities in healthcare distribution.

Dignity

Dignity refers to the importance that a patient and the person treating the patient gains through his or her inner value as a human being. In other words, it refers to a situation where a person's capabilities are effectively applied (Seedhouse & Gallagher, 2002). As such, dignity is a theoretical concept that plays a major role in healthcare ethics. Important contemporary debates concerning human dignity include:

> organ sales from living 'donors'; seeking patent rights over human genes; making animal–human chimeras; obliging someone to live in abject poverty; pornography; torture; sex selection by pre-implantation genetic diagnosis; death in irremediable physical or psychological suffering; abandonment to senility in a nursing home (Ashcroft, 2005, p. 679).

Truthfulness and Honesty

These qualities mark two of the most controversial topics in healthcare ethics. Whether or not one should give precedence to the duty to do well or the duty to avoid harm depends on the decisions made by the individual. To give an example, a doctor may conceal the whole truth from a patient about diagnosis, prognosis, or other issues, in order to protect the patient from distress and/or to maintain hope (Kirklin, 2007). Yet, by doing that, the physician is fundamentally denying the patient from exercising autonomy. Kirklin (2007) stresses that it should be ultimately the patient, and not the healthcare provider, who decides the extent of the truth that is needed to be known, and the facts should be communicated to patients in such a way that the patients will understand and make sense out of them.

Medical Ethics and Decision-Making

Ethical dilemmas are an integral part of medicine (Breen et al., 2008a; Saarni, 2007). They can occur at both micro and macro levels in our society: between patients and physicians, pharmaceutical manufacturers and consumers, or within an institution (e.g., the American Medical Association, the Food and Drug Administration, or the Public Health Service). Wherever ethical dilemmas arise, resolution results from clinical or organizational decision-making often based on systematic philosophy or theological principles that fall under the intellectual discipline recognized as medical ethics (Zussman, 1997).

Medical Ethics: Descriptions and Origin

Zussman (1997) describes medical ethics as a roughly explicit branch of applied philosophy involving discussions of general principles of utilitarianism (the greatest aggregate of good over evil for everyone), Kantian ethics (moral action out of a sense of duty), normative ethics (what people should believe as right and wrong), and distributive justice (what is right or just with respect to the allocation of goods in society). Ruddick

differentiates medical ethics (physician-centered) from healthcare ethics (nurses and other healthcare providers) and clinical ethics (hospital committees and consultants focused on specific cases) from bioethics (issues relating to reproduction, organ distribution, and biosphere protection) (Ruddick, 1998). Regardless of the differentiation, on a broad scale, medical ethics help to formulate responses to problems involving therapeutic practice, healthcare delivery, and medical and biological research (Zussman, 1997).

The first formalized enunciation of medical ethics occurred after WWII, in response to Nazi concentration camp medical experiments (Zussman, 1997). The "Nuremburg Code" established the principle of "voluntary consent" of human subjects "as essential to the ethical conduct of research". In the 1960s, revelations of medical experiments that abused the rights of poor, rural African Americans, prisoners, soldiers, disabled children, and the elderly prompted the U.S. Public Health Service to establish an Institutional Review Board to oversee and approve federally-funded research (Zussman, 1997).

The Four Principles of Medical Ethics Decision-Making

A less theoretically driven approach to medical ethics appeared in 1989 when Beauchamp and Childress articulated four principles (sometimes expanded to six) for ethical decision-making (Gillon, 1994). These principles (as aforementioned) include autonomy, beneficence, non-malfeasance, justice, dignity, truthfulness and honesty (Medical Ethics, n.d.). However, even these principles have come under fire from critics claiming that decisions reached by weighing each principle are too dependent on individual intuition (Ruddick, 1998). Gillon (1994) counters such arguments, stating that the four principles do not provide an analytical "method" for choosing or making decisions. Rather, they provide "a common set of moral commitments, a common moral language, and a common set of moral issues" when considered in association with an understanding of to whom or to what medical practitioners owe moral obligations.

Regardless of the methods or approaches taken in ethical decision-making, whether based on normative theories founded in teleology and deontology or the four principles, the complexity of the issues involved, uncertainty about institutional requirements, and fear of prosecution often leads to ethical passivity or inaction (Cooper, 2008). As a result, concerns about some medical providers' adherence to the duty of beneficence (the moral obligation to help patients) have been raised.

A Medical Provider's Ethical Dilemma: Self-Preservation or Beneficence

Many hospitals have resorted to paying trauma specialists – such as neurosurgeons, orthopedists, and general surgeons – stipends as high as $1,000 per day or $10,000 a week to take trauma and ED call coverage (Berenson, Ginsburg, & May, 2006). Even with stipends, neurosurgeons and other trauma specialists are refusing to take calls for a variety of reasons: malpractice liability, stress, lifestyle disruption, and non-payment. Some sub-specialists are dropping certain privileges so as to not be subject to ED calls. For instance, neurosurgeons at one hospital can drop their cranial surgery privileges and instead perform only spinal surgery, thereby restricting themselves from trauma calls (McConnell, Johnson, Arab, Richards, Newgard, & Edlund, 2006).

Besides the financial toll on hospitals created by the demand to provide on-call coverage (as high as $2.1 million a year in on-call pay alone) (Taheri, Butz, Lottenberg, Clawson, Flint, 2004), ethical questions arise when trauma specialists demand to be paid for on-call coverage or refuse to take trauma calls out of financial or personal concerns. Should the only neurosurgeon in a community be forced to provide ED coverage? On the other hand, should hospitals and trauma centers' demand such extensive coverage from a single doctor? What obligations do hospitals have to recruit in other providers who work in critically needed specialties?

A neurosurgeon's work is exceptionally demanding. Despite high salaries and large on-call pay stipends, there is little to suggest an "enviable" lifestyle. Years of intense education and training are rewarded with constant interruptions to private practice and personal life, high malpractice rates, and perhaps the almost daily expectation from patients' families and medical colleagues to perform miracles when treating the critically ill or injured. The personal and professional costs to neurosurgeons are likely huge (physician suicide rates are higher than the general population) (Schernhammer & Colditz, 2004), and the prospects of refusing to take calls or dropping out of the profession altogether are great (Taheri et al., 2004). For example, in deciding whether to take a call, a neurosurgeon undoubtedly weighs a variety of factors: lack of payment, disruption of an elective surgery practice, labor-intensive care, lower reimbursement rates, liability risks, and increased malpractice premiums (Trunkey, 1993).

Psychological distress may also contribute to the decision (McPherson, Hale, Richardson, & Obholzer, 2003). In conflict and crisis situations, physicians are generally expected to make decisions based on a patient's health and interests, no matter the risk of conflict they face in doing so (Hurst, Hull, DuVal, & Danis, 2005). Their decision to avoid conflict or crisis can be based on very practical reasons such as lacking necessary skills, the need to allocate resources elsewhere (e.g., their private practice), eliminating an obstacle to coordinated action, or avoiding conflict for its own sake (Hurst et al., 2005). Whether the decision by a neurosurgeon to refuse to take a trauma call is ethically sound or a blatant disregard of the value of beneficence is a subjective interpretation.

Hurst et al. (2005) found physicians more likely understand the meaning of integrity beyond its common use as a synonym for honesty. "Its full meaning … includes wholeness, the integration of personality into a harmonious whole, holding steadfastly true to one's commitments, and *regarding one's own judgment as one that should matter to others*, as well as acting morally (Hurst et al., 2005)". Therefore, whatever neurosurgeons' reasons are for demanding a stipend for on-call duty or refusing to take trauma calls at all – whether out of concern for non-payment, high liability risk, or disruption of private practice or personal life – it appears many neurosurgeons hold fast to their decisions regardless of the ethical questions raised in doing so.

Ethical Decision-Making Models

Ethical decisions often involve numerous factors and considerations; therefore, the application of sound ethical decision-making models is imperative in the healthcare industry. As society advances, so does the need for ethical considerations (Switz, Crowley, Hook, & Mueller, 2007). Although many institutions utilize ethics review boards and committees, decision-making models and frameworks serve as a guide

for ethical decision-making, as well as to the universal principles in management and clinical decision-making settings (Beauchamp & Childress, 2001). Healthcare managers often employ the same strategic approach to ethical dilemmas as philosophers: the use of moral reasoning. Sequentially, providers analyze the situation of the perceived dilemma, carefully weigh strengths and weaknesses of alternatives, justify moral reasoning and principles in accordance with organizational and personal ethics, and finally select a justified option (Darr, 1997).

The Jonsen Four Quadrant Model (Figure 1) serves as a useful model for considering ethical dilemmas through comprehensively considering all salient issues in complex medical cases. The models' four critical sectors include: 1) medical indications, 2) patient preferences, 3) quality of life, and 4) contextual features (Jonsen, Siegler, & Winslade, 2001).

Medical Indications	Quality of Life
Patient Preferences	Contextual Features

Figure 1: Jonsen Four Quadrant Model (Jonsen, Siegler, & Winslade, 2001)

In considering the medical factors, providers weigh issues such as disease treatment, palliative care, patient education of prognosis and treatment, avoidance of harm, and improving individual functioning. In this sector, providers must also carefully consider patient preferences in the context of their individual decision-making abilities. Patients should be informed of the risks and benefits involved in medical procedures and allowed to make a decision for treatment based on their personal values. Incidentally, providers have the "right to futility" in that they cannot be forced to undertake a procedure they object to performing. For instance, providers who are pro-life can refuse to prescribe Plan-B for their patients. Contextual features must also be considered, including rules of law, institutional policies, family desires, as well as the needs of the society. Although the Jonsen model is useful in complex medical cases – which allow a significant amount of time for ethical considerations – the model is not always practical in most clinical settings requiring rapid decision-making (Jonsen, Siegler, & Winslade, 2001). In these cases, providers and managers must use their reliance on the universal principles, professional codes of ethics, and their individual judgment (Hurst, Duval, and Danis, 2005).

Case Study: An Application of the Jonsen Model

A 38-year-old Asian woman presents to an emergency room with an 8-year-old child, stating that her child has a fever of 103, chills, dry non-productive cough, malaise, and generalized aching. The physician notes that as the mother removes the child's shirt for a physical examination, the child winces with pain. Upon visual inspection, the physician recognizes a distinct pattern of bruises on the boy's upper back. The mother voluntarily informs the physician that the bruises are the result of the traditional practice "cao gio", or "coining". She tells the physician that she used a small gold

piece to rub heated oil on the boy as a part of what she learned in her home country. The physician recognizes the bruises as something from an Asian cultural practice: to increase the exchange of good blood and bad blood in an effort to heal illnesses. After gaining approval to examine the child, the physician notes that the rubbed areas create a tremendous source of discomfort in the child and that some of the areas were severely bruised.

In considering the quadrants of the Jonsen Model in this case, providers must carefully consider all salient factors including: "medical indications" (e.g., flu-like symptoms, avoidance of harm, diagnosing and treatment of the illness, educating other on child's condition and treatment); "quality of life" (e.g., pain, quality of life after treatment); "patient preferences" (e.g., cultural practices, desires of parent); and "contextual features" (e.g., hospital policies, laws regarding reporting suspected child abuse, social and cultural norms, family wishes, language barriers, duties to self as provider). Employing this ethical decision-making model provides the practitioner with the opportunity to weigh all relevant factors and considerations in determining an appropriate ethical decision (Cirone, 2008).

Discussion

This analysis strategically contextualizes ethics in healthcare from primitive medicine through modern medicine, while fully demonstrating the need for adherence to core values, ethical decision-making models, and professional codes of ethics. Since the formulation of the Hippocratic Oath, physicians have held themselves to high ethical standards, rooted in the concepts of beneficence and non-malfeasance. Although these two core principles serve as the primary foundation of ethical decision-making in healthcare, the principles of autonomy, justice, truthfulness, and honesty are of tantamount importance. These universal principles, either moral commitment or individual moral obligation, are at the core of each practitioner's duty to his or her patient. Even greater than financial incentive, self-preservation, or professional responsibility, a solemn "duty" to the patient is paramount. As asserted by Hippocrates, providers must have honor in their delivery of healthcare and not only to individual patients. Percival's introduction of the first medical code of ethics sought to address societal challenges, such as those witnessed during slavery and the outbreak of communicable diseases. Percival sought to ensure that medical providers were properly guided by ethical and moral standards that transcended those sworn to during the administration of the Hippocratic Oath. Providers worldwide participate in ceremonies and associations in which "oaths and codes" are attached; however, it is always reliance on and faithfulness to the universal principles that promotes adherence to the highest ethical standards in healthcare.

Potential or actual ethical dilemmas can be discovered through either theoretical conceptualization or empirical studies. Bridging the gap between theory and practice is often difficult in healthcare settings. Yet, theoretical frameworks can prove quite useful in assisting committees and professionals in addressing ethical questions raised by individuals, family members, peers, and external entities. For instance, the application of Rawls' first principle, liberty, to healthcare situations reminds us that individuals are entitled to the broadest set of basic liberties possible (Rawls, 1971). This concept is pivotal in the ethical discussion of universal healthcare for everyone, regardless

of income, race, or ethnicity. In contrast, empirical studies are useful in elucidating questionable situations for ethical consideration which may not be otherwise perceived. Healthcare institutions and policy makers use empirical studies as catalysts to formulate laws and alter clinical practice guidelines towards ensuring that health services are delivered in an ethical, just manner.

There exists a thin line between the law and ethics in healthcare. Practicing medicine in a litigious society is not without risks. Providers must carefully consider their selection of areas of specialization as certain certifications carry an increased risk of litigation. For example, an increasing number of lawsuits have been filed related to issues surrounding childbirth. As a result, the premiums for insurance coverage have escalated for physicians engaged in the practice of obstetrics. This is a critical issue because of the propensity to affect the quality and access to providers in certain rural and underserved areas. From a social-justice perspective, legislation addressing tort reform serves to improve the level of care offered to these communities. Other public laws – such as Medicaid and Medicare – serve to improve the abilities of the poor, elderly, and disabled in their acquisition of equality in accessing healthcare services.

Although these programs are mandated by law, provider participation is voluntary. The structure and administration of these two programs have created ethical and social-justice questions, as they generally exclude vulnerable groups, fail to employ quality or performance measures, and are riddled with inefficiencies, fraud, and abuse. Additionally, these quasi-federal programs place the discretion of administration on individual states that may not place a high priority on caring for disadvantaged or vulnerable populations. It is here that the importance of universal principles and codes of ethics comes into play. The role of the provider is not limited to caring for the individual patient, but there is an ethical obligation to the "entire public health" as well.

Provider adherence to the universal principles ensures society that the healthcare industry is capable of behaving in an ethical manner in addressing ethical and social-justice issues. However, recent biomedical ethicists have elevated ethical discussions as a broader span of ethical considerations and factors are now necessary for inclusion. Throughout this analysis, we have presented numerous ethical situations that were brought to the forefront because of advances in technology or revisions in the law affecting public health. Nevertheless, future ethical and social-justice issues will continue to intensify as society prepares to respond to questions such as the following: 1) Do racial and ethnic disparities represent social injustices as a result of empirical evidence demonstrating inferior treatment, discriminatory practice, and provider bias; 2) Is it unethical for insurance carriers to fully cover the cost for medications for erectile dysfunction medication while denying coverage for birth control medication; 3) Are mandatory immunizations a violation of an individual's right to autonomy in health decision-making; 4) What moral and ethical obligations do physicians have in refusing to give a child growth hormones at their parent's request; and 5) Does the healthcare system in the United States violate an individual's fundamental right in the pursuit of liberty.

Health professionals can advance ethical discussions in these and other issues through the use of research and theory. As advances in health readily come to fruition, health professionals must be pragmatic in approaching these societal advances by considering each case and circumstance on individual merit. The future of healthcare

relies upon individual professionals as well as the collective society acknowledging that, while individuals and systems are fallible, we are to remain committed to open-minded debates and deliberations of ethical and social justice issues (Brendel & Miller, 2008). The very nature of healthcare assures that the vast majority of people are interested in what happens in the industry, if only for personal reasons. As advances in society also occur, the public's interest, coupled with media scrutiny, automatically elevates this tall discussion.

Astute and learned healthcare professions, motivated by the universal principles, can effectively engage in empirical research studies and employ theory as a guide to explain and understand social injustice. In every society, ethical and social justice issues are omnipresent and healthcare professionals are uniquely poised to ensure that, as society advances, so do the ethical standards of a healthcare system.

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MEDICAL ETHICS AND THE FAITH FACTOR: THE ENDANGERED RIGHT OF CONSCIENCE

ROBERT D. ORR, MD, CM

Abstract

The right of healthcare professionals to decline participation in specific procedures they believe to be immoral has been an unquestioned tenet of medicine for centuries. Since the shift in medical ethics in the past generation whereby patient autonomy has become the dominant principle, this right of conscience has been challenged. It has been most directly challenged by Opinion #385 issued by the American College of Obstetricians and Gynecologists (ACOG) in November 2007. This article reviews the pertinent history of medical ethics, focusing on the right of conscience, and the ethical issue of moral complicity. It then presents recent challenges to the right of conscience, including some specific recommendations from the ACOG proposal to limit that right, and goes on to articulate their flawed assumptions.

A (Very) Brief Review of the History of Contemporary Medical Ethics

Discussions of ethical matters in the practice of medicine date back to Hippocrates in the fifth century before Christ. However, the era of formal medical ethics began in the early 19th century[1] and became even more relevant to contemporary medicine as recently as the 1960's. At that time, technological advances caused physicians to ask some "Can we…?" questions. Can we dialyze patients with kidney failure? Can we use ventilators to breathe for patients in respiratory failure? Can we transplant new hearts into dying patients? And the answers were most often "Yes, we can."

Theologians, however, were prompted to ask instead the "Should we…?" questions. Should we dialyze *this* patient? Or, more on point, how do you justify not dialyzing this patient? Should we retrieve hearts from people at the moment of death? And there were similar questions about the application of several other technologies. Roman Catholic, Jewish, Protestant, and Islamic theologians initiated the era of contemporary medical ethics in the mid-20th century. In their 1993 retrospective book, Lammers and Verhey focused on significant contributions of nine theologians who pioneered in the field.[2] Many people involved in the practice of medicine and public policy were eager to hear theological views on such questions. Others, however, felt "religion is a private matter" and should not be part of the public dialogue.

Several pivotal questions raised by the theological voice concerned matters of life and death, both at the beginning and ending of human life. These were prompted, of course, by the tenet of the *Imago Dei* articulated in all three of the monotheistic faith traditions, and were informed by theological beliefs about justice.

After more than a decade of public discussion, the newly developed "right of privacy" was sanctioned by the 1973 U.S. Supreme Court in the *Roe v Wade* decision

which rendered null and void all state laws which prohibited abortion. Sadly, in my opinion, the theological voice was split in its response to this sea change.

At about the same time, secularists who felt the theological voice was too prominent or too biased in these discussions began to shift the focus of discussion from places of worship and schools of theology to the academy and the courts. Rather rapidly, philosophers, attorneys, judges, and individuals in public policy became the voice of medical ethics. The theological voice was marginalized, ignored, or even ridiculed.

In spite of this shift, it was recognized even by the secularists, that individuals of faith should be protected from discrimination if healthcare professionals acted (or declined to act) based on their religious beliefs. This protection came from the right of conscience.

The Right of Conscience

The right of conscience is the right of an individual to refuse to do something requested by another based on his or her own conscience or religious beliefs. Probably the most easily recognized example is the conscientious objector who is conscripted into military service and is unwilling to engage in combat, or sometimes even in a supportive military role.

This is not a newly recognized right. It has been well accepted in theological and theocratic circles for millennia that an individual believer was to resist imposed practices that were contrary to his beliefs, though the obligation often carried negative consequences (e.g., Daniel chapter 6). This right began to gain credence in secular circles during the Enlightenment, and was clearly articulated by Thomas Paine[3] and Thomas Jefferson[4]. The right of conscience was clearly stated in early drafts of Madison's first amendment to the Constitution[5], though obscured in the shortened final version[6].

The Right of Conscience in Medicine

The right of conscience in medicine generated very little discussion prior to the current generation. It was assumed for centuries. Physicians took a primarily paternalistic approach to patient care --- this is what's wrong; this is what we need to do; let's go ahead and do it. In the 1960's and '70's, individual autonomy emerged in western society --- individual rights, women's rights, minority rights, consumer rights, and yes, patient rights. Patients rightly demanded greater say in their own medical care. When the locus of decision-making shifted at least partially from physician to patient, many thought that the patient could not only refuse treatment, but could also demand treatment. Only in this autonomy-focused setting has the physician's right of conscience become an issue.

The concomitant legalization of abortion, which had been morally and legally forbidden for centuries, brought the issue into sharp focus. Can a physician or other healthcare professional who still considered abortion to be immoral be forced to participate in this procedure? Or in broader terms, does a healthcare professional have the right to refuse to provide a particular service based on religious beliefs?

This concern about the right of conscience in healthcare, while most often raised in relation to abortion, is also a factor in other areas of the practice of obstetrics and gynecology (sterilization, contraception, assisted reproductive technology) and in

other medical disciplines as well[7]. For example, a Roman Catholic physician, nurse, or pharmacist may be unwilling to participate in distribution of any contraceptive; or the professional may be unwilling to provide contraception for an unmarried person or to assist a woman to get pregnant if she is only involved in a same-sex relationship.

With the long history of unquestioned right of conscience for healthcare professionals, it is not surprising that the response to this question has been quite uniform and quite broad. The medical right of conscience has been codified in U.S. medicine[8], U.S. federal law[9], U.S. state laws[10], international law[11], and international medicine[12]. Some of these policies or laws, however, carve out exceptions "in cases of emergency" and/or include provisions that require the dissenting healthcare professional to refer to a willing professional.

The Issue of Moral Complicity

Such articulations of less than clear boundaries broadens the question from "doing" the procedure one considers immoral, to assisting directly, assisting indirectly, or referral of patients. Different people may draw their lines of moral complicity differently. One physician may be unwilling to do an abortion, but willing to refer; another may be unwilling to refer, believing that makes him or her complicit in an immoral act.[13] One non-professional may be unwilling to work in a general OB/GYN clinic where abortion is one of the services offered, another may be willing to work there, but decline to participate in any aspect of the procedure, and yet another may feel sufficiently removed from the procedure so as to be willing to check in patients, sterilize instruments, etc.

In thinking about the issue of moral complicity, I have previously stated that many factors may enter into one's perception of involvement: timing, proximity, certitude, awareness, and intent[14].

Opposition to a Healthcare Right of Conscience

Support for the healthcare professional's right of conscience has not been universal. Organizations like Planned Parenthood and the American Civil Liberties Union have formally objected. The bases for objection are basically of two types: (1) doctors no longer have extraordinary privileges because of the prominence accorded to patient autonomy, and (2) doctors have the duty to provide all legal services. Legal cases involving the right of conscience of individuals or institutions have been taken to court in several states[15].

Alta Charo, an attorney and teacher of bioethics at the University of Wisconsin has written "Should the public square be a place for the unfettered expression of religious beliefs…? … Until recently, it was accepted that the public square in this country would be dominated by Christianity. …[A]theists, agnostics, and members of minority religions view themselves as oppressed… [F]rustrated patients view conscience clauses as legalized discrimination." She goes on to conclude "…[T]he states…give these professionals the exclusive right to offer such services. By granting a monopoly, they turn the profession into a kind of public utility."[16]

Julian Savulescu, Oxford philosopher, has written "When the duty is a true duty, conscientious objection is wrong and immoral. …If people are not prepared to offer legally permitted, efficient, and beneficial care to a patient because it conflicts

with their values, they should not be doctors. …Conscientious objectors must ensure that their patients are aware of the care they are entitled to and refer them to another professional. … Conscientious objectors who compromise the care of their patients must be disciplined."[17]

American College of Obstetrics & Gynecology (ACOG) Proposal to Limit the Right of Conscience

In November 2007, the ACOG Ethics Committee issued position statement #385 entitled "The Limits of Conscientious Refusal in Reproductive Medicine." In the statement, they define conscience, define limits for conscientious refusal, delineate institutional and organizational responsibilities, and make seven recommendations. Some of the recommendations are not unreasonable (about accurate and unbiased information[18], obligation for prior notification), but others are clearly contrary to the longstanding understanding of physicians' right of conscience.

Recommendation #1 includes "…Any conscientious refusal that conflicts with a patient's well-being should be accommodated only if the primary duty to the patient can be fulfilled." According to ACOG, the patient's wishes trump; her "well-being" is self-defined. Thus, by their assessment, each physician is obligated to provide all services requested by a patient.

Recommendation #4 insists the refusing physician has a duty to refer the requesting patient to a willing physician. They display no regard for physician concerns about moral complicity.

Recommendation #5 includes "In an emergency in which referral is not possible or might negatively affect a patient's physical or mental health, providers have an obligation to provide medically indicated and requested care regardless of the provider's personal moral objections." Though the underlying premise is valid, the services in question are rarely life or death emergencies, and inclusion of a mental health provision boundlessly expands this requirement.

Recommendation #6 says that in resource-poor areas, physicians who are unwilling to provide full reproductive services should "practice in proximity to individuals who do not share their views or ensure that referral processes are in place." In no other area of medicine is it assumed that every patient must have convenient access to all services. Living in a resource-poor area may mean that a patient does not have access to a dermatologist or a neurosurgeon. Certainly a physician practicing in such an area must be willing to provide all emergency services in which he or she is adequately trained. However, there is no such obligation for elective procedures, even if he or she is capable. In no other area of medicine am I familiar with a professional requirement that a physician must limit or move his or her practice location to satisfy patient requests.

Response to ACOG

I believe the ACOG statement asserting limits to the healthcare professional's right of conscience is seriously flawed in several areas:

- ACOG maintains that patient autonomy is the final arbiter of treatment decisions. This is not always true. There are clearly times when patient

autonomy is not the determinative factor, such as imposed immunizations, imposed quarantine, imposition of life-saving treatment when a patient has made an irrational refusal, treatment and prevention of suicide.

- ACOG asserts that whatever is legal is socially acceptable, and thus licensed professionals are obligated to provide such services. Acceptance of this flawed precept would require a physician to provide or facilitate each patient request for a legally available service, e.g., every Oregon physician would be required to assist a patient with a request for suicide.

- ACOG erroneously maintains that negative patient autonomy (the right to refuse a recommended treatment) and positive patient autonomy (the right to demand a treatment) are morally equivalent. It is a well-established and longstanding tenet of medicine that the patient's right to refuse is nearly inviolable, but a patient's right to demand a specific treatment is subject to physician discretion and veto. Were this not so, patients could demand unnecessary surgery, and they would not require prescriptions for antibiotics or narcotics. Society has supported such professional refusals of procedures or drugs the physician believes to be deleterious to the patient based on patient beneficence. Similarly, society has until recently supported physician refusal based on his or her right of conscience.

- ACOG assumes that matters of conscience for the professional are matters of personal opinion rather than matters of divine or ecclesiastical authority. For a physician to acquiesce to parental refusal of analgesics for a suffering child is not a personal opinion. It would be a violation of both the basic tenets of medicine and the divine obligation of compassion.

- ACOG states that a *prima facie* value can and should be overridden in the interest of other moral obligations that outweigh it, but they are unwilling to grant that trumping weight to moral obligations with which they disagree.

Some individuals of faith and a few faith-based organizations have strongly objected to ACOG's Opinion #385[19]. In March 2008 ACOG released a statement saying because of "uncertain and mixed interpretations" their Ethics Committee would hold a special meeting to reevaluate its position.

Conclusion

It has been assumed for centuries that healthcare professionals are moral agents who have the right to refuse to provide requested services that conflict with their religious beliefs. This assumption is being challenged. This ancient right should be defended by all of society, and it must be defended by people of faith.

Endnotes

1. Thomas Percival's Medical Ethics, 1803; American Medical Association's first "Code of Ethics," 1846
2. Allen Verhey and Stephen E. Lammers, eds. Theological Voices in Medical Ethics. Grand Rapids, MI: Edrdmans, 1993
3. Rights of Man, 1791
4. "The rights of conscience we never submitted, we could not submit. We are answerable for them to our God." Notes on Virginia,Q.XVII, 1782. "No provision in our Constitution ought to be dearer to man than that which protects the rights of conscience against the enterprises of the civil authority." Speech to New London Methodists, 1809
5. "The Civil Rights of none shall be abridged on account of religious belief or worship, nor shall any national religion be established, nor shall the full and equal rights of conscience be in any manner, nor on any pretext infringed. No state shall violate the equal rights of conscience or the freedom of the press, or the trial by jury in criminal cases." First draft, 1 June 1789
6. "Congress shall make no law respecting an establishment of religion, or prohibit the free exercise thereof." Final draft, September 1789
7. e.g., end-of-life care (stopping ventilator support, dialysis, feeding tubes), prisoner interrogation, capital punishment, genetics, research (embryonic stem cells, cloning), writing or dispensing lethal prescriptions (Oregon), oral contraceptives (especially the "morning after pill"), and more.
8. American Medical Association: "…neither physician, hospital, nor hospital personnel shall be required to perform any act violative of personally held moral principles. In these circumstances, good medical practice requires only that the professional withdraw from the case, so long as the withdrawing is consistent with good medical practice." H-5.995 Abortion
9. The Health Services, Medicare and Medicaid Acts all include protections for physicians unwilling to do abortions or sterilizations.
10. Forty-five states have right of conscience statutes.
11. European Convention on Human Rights, Article 9
12. World Medical Association's Declaration of Geneva, 1948 & 1968: "I will practice my profession with conscience and dignity; the health of my patient will be my first consideration". The World Health Organization's Considerations for Formulating Reproductive Health Laws guarantees the right of conscience based on religious or philosophical beliefs.
13. See A. A. Howsepian, "On Referring," *Ethics & Medicine* 25 (2009): 31-47.
14. Addressing issues of moral complicity: When, where, why and other questions. *Dignity* newsletter of the Center for Bioethics and Human Dignity, Spring 2003;9(2):1,5. Available online at http://www.cbhd.org/resources/bioethics/orr 2003-05-23
15. E.g., private sectarian hospitals receiving state or federal funds must make operating rooms available for abortion procedures (Alaska); physician group sued for discrimination after refusing to provide assisted reproductive services to a lesbian woman (California); mandate that pharmacists dispense "morning after pill" (Illinois)
16. *New England Journal of Medicine* 2005;352(24):2471-3
17. *British Medical Journal* 2006;332:294-7
18. Edmund Pellegrino, chair of the President's Council on Bioethics, has noted the irony of this provision since ACOG has gone to court to fight laws requiring abortion doctors to offer informed consent information to patients on the risks and alternatives to abortion [ACOG v Thornburg, 737 F.2d 283, 297-98 (3d Cir. 1984)]
19. See for example: www.cmda.org

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BOOK REVIEWS

Assisted Suicide and Euthanasia: A Natural Law Ethics Approach

Craig Paterson. Burlington, Vermont: 2008.

ISBN 978-07546-5746-0; 228 PAGES, PAPER, $34.95

Both assisted suicide and euthanasia are growing areas of ethical concern in our society. Natural law can play a role in bridging the gap between Christian and secular ethics, which is what makes this book intriguing. Paterson attempts to accomplish two things: analysis of the ethics of assisted suicide and euthanasia and establishment of a purely secular version of natural law ethics upon which to ground his conclusions about the morality of euthanasia. It appears to me that he has handled his first objective quite well, while failing at the second.

The analysis of the ethics of assisted suicide and euthanasia is very well done. Paterson analyzes the justifications for euthanasia in its various forms and demonstrates the weaknesses of each. Included are arguments that rejection of euthanasia is solely based on religious doctrine which is unsupportable in the secular arena, that opposition to euthanasia based on sanctity of life is inconsistent with an allowance of intentional killing in cases of self-defense or capital punishment, and that the value of human life must be weighed against other things such as suffering which may outweigh it. It also includes a discussion of the emphasis by euthanasia supporters on personal autonomy, the rejection of the principle of double effect, and the limitation of role of the state in responding to differing ideas of the good life.

In support of the position that euthanasia should be ethically prohibited, Paterson discusses reasons for considering euthanasia a form of homicide, the unreasonableness of thinking that a person can benefit from their own death, the idea that the worth of a human life is not dependent on the quality of that life, and the significant ethical distinction between intentionally causing death and allowing death to occur. He also makes the important point that personal autonomy needs to be subject to moral limits.

Paterson attempts to ground his arguments in his own version of secular natural law, but that is where he fails. He starts with a concept of primary goods which are the observed reasons for human action that are ends unto themselves. These goods are nonnormative. That means they are descriptive of what is, but not an expression of what ought to be. From the descriptive primary goods, by what appears to be a linguistic sleight of hand, he derives what is good in a moral sense. He is missing an adequately grounded moral first principle that other systems of natural law find in the purpose of a designer or creator.

Overall, the analysis of euthanasia and assisted suicide is a positive addition to the discussion of this timely issue, but it requires a firmer foundation than his system of secular natural law ethics is able to provide.

Reviewed by Stephen A. Phillips MD, MA (Bioethics) who has practiced Family Medicine full-time in Plymouth, Indiana for the last 28 years and is currently involved in establishing an Ethics Center at Taylor University in Upland, Indiana, USA.

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The Center for Bioethics and Culture Network,130 Market Place, #146,San Ramon, CA, 94583

Innovation in Medical Technology: Ethical Issues and Challenges

Margaret L. Eaton and Donald Kennedy. Baltimore, MD: The Johns Hopkins University Press, 2007.

ISBN 0-8018-8526-4; 155 PAGES, HARDCOVER $35.00.

The rapid pace of medical innovation poses complex ethical challenges. In *Innovation in Medical Technology*, Eaton and Kennedy explore the case studies and reflections from the Lasker Forum on Ethical Challenges in Biomedical Research and Practice, held in Washington, D.C., on May 15 and 16, 2003. Seeking to investigate the adjoining areas of innovative clinical practice and more formal research, the forum focused on informal ways to improve the process of medical innovation, such as nongovernmental oversight, better disclosure to patients, and better collection and distribution of data.

Eaton and Kennedy seek 'to provide educational material about the nature and consequences of medical innovation and to contribute to the national discourse about how the value of modern technological development in medicine can best be served' (xii). They succeed in this objective, highlighting the need to question innovation, explaining the difference between innovative practice and research, and providing a brief modern history of human research ethics.

Innovations in four areas (off-label drug use, surgery, assisted reproduction, and neuroimaging) with accompanying case studies occupy the middle of the book. In each instance, the authors summarize the necessary information about each field and then provide a case study from the forum, which includes insightful questions pertaining to the various areas of concern.

The authors focus the discussion on four core issues deemed necessary for moving the discussion forward in their final chapter and conclusion. First, they recommend that a mediating category between research and practice be recognized, since in reality much innovation occurs in contexts that do not fit the formal definitions of either one. Second, they advise a cautious approach to oversight, one that recognizes both the burdensome nature and necessity of accountability. Third, patient disclosure must truly facilitate understanding rather than providing puzzling information that only confuses the uninitiated. Fourth, medical professionals must recognize their duty to both learn and educate other practitioners by keeping systematic records of innovative changes, so that colleagues can be guided by both success and failure.

This work provides both medical practitioners and academicians of various levels of experience with a helpful overview of the complicated dilemmas surrounding innovation in medicine. Views on the topic range widely, but the authors are correct in calling for enhanced discussion and consensus building. Such discussions will only prove more difficult as innovative technology becomes increasingly attractive for enhancement, as patients are able to learn about innovation on the Internet and pursue it in unregulated countries, and as access to health insurance continues to change, affecting the availability of new techniques to the greater public.

Innovation in medical technology will continue to move forward at a rapid pace, and books such as this one will aid ethical reflection in catching—and (hopefully) keeping—up.

Reviewed by Jacob William Shatzer, MDiv, who serves on the staff of the Kairos Journal and lives in Louisville, KY.

Artificial Nutrition and Hydration and the Permanently Unconscious Patient

Ronald P. Hamel and James J. Walter, Editors. Washington, DC: Georgetown University Press, 2007.

ISBN 978-1589011786; 294 PAGES, PAPER, $29.95.

Dealing with the subject from different perspectives, this collection is a guide to the Roman Catholic debate about artificial nutrition and hydration for patients in the persistent vegetative state (PVS). The exception is a position paper of the American Academy of Neurology which is written from a medical perspective. But, together with Myles Sheehans' paper on feeding tubes, it serves as a starting point for the subsequent papers in the debate. Included in the volume are several magisterial and Episcopal statements including that of Pius XII (to which Panicola refers), the 1980 *Declaration on Euthanasia* by the Sacred Congregation of the Doctrine of the Faith, and John Paul II's 2004 papal allocution *Life-Sustaining Treatments and Vegetative State: Scientific Advances and Ethical Dilemma* (along with a number of responses).

The first of these papers – written from a historical perspective – shows two divergent schools of thought. Michael Panicola and Ronald Hamel side with one, Donald Henke with the other. By stressing that Pius XII (in his statement on the prolongation of life) insisted that life is not an end in itself but the basis for spiritual pursuits, Panicola argues that the best treatment for PVS patients is non-treatment, including withdrawal of artificial nutrition and hydration. Henke, on the other hand, takes the view that the withdrawal of artificial nutrition and hydration from PVS patients amounts to abandonment and a failure to recognise God as the master of life. Moreover, he says that it implies that some lives are not worth preserving. Henke thus adopts what Panicola and Hamel call the more 'restricted standard,' according to which artificial nutrition and hydration are morally obligatory unless they cannot be assimilated by the patient's body or they bring no comfort to an imminently dying patient.

Thomas Shannon and James Walter interpret the papal allocution as representative of what Panicola and Hamel call the 'restricted standard' or what they call the 'revisionist position.' Emerging in papal and other Vatican statements since the 1980s, they see this view as a shift from a patient-centred approach (one of weighing benefits and burdens of various interventions to the individual patient) to a principle-based position which stipulates that some medical interventions are obligatory. Kevin O'Rourke agrees whereas Richard Doerflinger as well as Mark Repenshek and John Paul Sloskar jointly disagree.

In a second jointly written paper Shannon and Walter argue against views on artificial nutrition and hydration that make biological life an ultimate value. While affirming all persons of equal moral worth, they argue for the moral permissibility of foregoing or withdrawing artificial nutrition and hydration for PVS patients. They distinguish this from euthanasia because the intent is to end a procedure that is not appropriately benefiting the patient and/or to release the patient from entrapment in technology. Daniel Sulmasy similarly argues against over-use of technology, saying that doctors must not become servants or slaves of technology.

Germain Grisez dissents. He argues that artificial nutrition and hydration should be provided for PVS patients in affluent societies such as the United States, and to not do so is to abandon the patient. That is, artificial nutrition and hydration should be provided unless the patient, while still competent, indicated the desire to not be fed if permanently unconscious. According to Grisez, the PVS patient's life is an intrinsic good, distinct from an instrumental good for the pursuit of spiritual goods. To argue otherwise is to embrace dualism, he insists, because as long as the body is alive, the bodily person is alive. John Connery argues along similar lines in his paper commenting on the case of Clarence Herbert, a patient diagnosed with permanent coma following an operation and whose life support, including artificial nutrition and hydration, was removed. The California Court of Appeals overturned a lower court decision that withdrawing artificial nutrition and hydration was illegal.

The closing paper by Richard McCormick is a plea that, while drawing lines clearly, they not be too restrictive. He opines that in the case of Claire Conroy, the New Jersey Supreme Court argued correctly

when it upheld the guardian's right to represent the severely disabled but not unconscious patient's wishes and right to refuse treatment including artificial nutrition and hydration.

On the whole, the collection of arguments is well balanced. If there is a slight imbalance, it is in favour of the less restrictive view. That said, this informative collection is bound to stimulate further theological and philosophical discussion among students and scholars about a much debated issue.

Reviewed by Agneta Sutton, PhD, who is a Senior Lecturer at Chichester University and a Visiting Lecturer at Heythrop College at the University of London, both in the UK.

Contemporary Catholic Health Care Ethics

David F. Kelly. Washington D.C.: Georgetown University Press, 2004.

ISBN: 1-58901-030-2. 336 PAGES, PAPER, $32.50.

Roman Catholic, but critical of Roman Catholic tradition, David Kelly introduces contemporary Catholic thinking on some of the major issues in medical ethics, doing so in light of developments within Catholic thinking since Vatican II. While his focus is on Catholic thought today, his book also has a historical dimension.

Kelly begins by introducing basic distinctions and concepts in ethics – ethics as a philosophical discipline about moral responsibility and theories of right and wrong, or what is often called meta-ethics. Reading like an introductory lecture to undergraduates, it sits uncomfortably with the majority of the book, which deals with normative ethics, particularly as related to abortion and euthanasia. Here, Kelly engages with more traditional Roman Catholic thinkers, at times taking issue with their conclusions but more often disagreeing with their arguments.

So, the book reads in part as if directed at those not yet acquainted with ethical discourse, while other parts address those who are well informed about health care issues with a long history of ethical debate, especially in Roman Catholic circles. If this style is intentional, presumably it is adopted in order to reach undergraduate students as well as the more mature academics and practitioners.

As an ethicist, Kelly adopts a 'personalist and proportionalist' approach and is critical of what he describes as the traditional Roman Catholic act-oriented or 'physicalist' normative ethic. He feels the latter has dominated Roman Catholic medical ethics as well as pre-Vatican II thinking. To illustrate 'physicalist' reasoning, he uses the example of the contraceptive pill versus natural birth control. While both impede procreation, the former does so by disassociating conception from intercourse while the latter, by avoiding intercourse during the most fertile periods, does not uncouple procreation from the act of intercourse. The former is considered 'wrong' while the latter is not. He says, 'the only difference between the permitted and the proscribed methods of birth regulation is found in the nature of the act-in-itself.' (105) In contrast, for the 'personalist and proportionalist' thinker like Kelly, intention matters. In the illustration given, since the intention of both methods is identical, their acceptability would be as well.

Not convinced by the 'physicalist' approach, Kelly is also critical of some applications of the principle of double effect. In the case of an ectopic pregnancy, for instance, the 'physicalist' allows the removal of the fallopian tube resulting in the death of the embryo/foetus. The death is considered a side effect of the act intended to save the mother's life. To be precise, then, the death of the embryo/foetus is an *indirect* side effect; it is neither the end sought nor the means whereby the mother is saved. Moreover, this regrettable side effect is outweighed by the good achieved.

In contrast, however, the principle of double-effect would not allow the removal of the embryo/foetus from the fallopian tube while leaving the tube in place even though this procedure is safer for the mother and increases her chance of subsequent pregnancy. It is argued that the removal of the embryo/foetus *directly* results in its death so that death is seen as the *means* whereby the woman is saved. Kelly notes, that this 'physicalist' or act-oriented reasoning, presents Catholic doctors with a dilemma. In contrast, he says, 'proportionalist' thinking would argue 'that we should do the procedure that causes the most

good and the least harm.' So, for Kelly, laparoscopic removal of the embryo/foetus from the fallopian tube would be the morally right thing to do in the case of an ectopic pregnancy, especially since the embryo/foetus would die in any case.

Much of the book is taken up with physician-assisted suicide and euthanasia – the difference between killing and letting die. The traditional Roman Catholic distinction between ordinary and extra-ordinary means is well explained. Again, Kelly rejects an act-oriented approach arguing that what is ordinary in one situation may be extra-ordinary in another. Thus, if in most cases of pneumonia the use of antibiotics would be ordinary, it would nonetheless be extra-ordinary in the case of a patient dying from cancer.

Kelly makes the distinction between morally ordinary and morally extra-ordinary by saying that 'allowing to die is morally right when it is the foregoing of morally extra-ordinary means.' In other words, treatment can be foregone if it is of little benefit to the patient or imposes a significant burden. On the basis of this understanding, he argues, it could be acceptable to withdraw artificial nutrition and hydration from a PVS patient, especially if the patient had previously indicated that this was their preference. Arguing thus, he takes issue with the position adopted by the Magisterium for, as he notes, John Paul II has explicitly declared that hydration and nutrition are morally ordinary means for PVS patients and that foregoing this treatment is euthanasia by omission.

While more traditionalist Roman Catholic theologians might find Kelly's reasoning too revisionist for their liking, they would have to admit that by engaging with them, he clearly brings to the fore the conceptual distinctions and the natures of the arguments on both sides of the argument. In short, I warmly recommend this book to anyone interested in the Roman Catholic way of thinking about questions in the field of medical ethics.

Reviewed by Agneta Sutton, PhD, who is a Senior Lecturer at Chichester University and Visiting Lecturer at Heythrop College at the University of London, both in the UK.

Embryo: A Defense of Human Life

Robert P. George and Christopher Tollefsen. New York: Doubleday, 2008.

ISBN: 978-0385522823; 256 PAGES, HARDCOVER, $23.95.

Human dignity is sometimes best exemplified by human heroism, as in the case of Noah Markham. Noah, trapped in New Orleans by Hurricane Katrina, was rescued from the flood waters by a dedicated team of police officers in a flat-bottomed boat. He was the youngest person to escape from the disaster – he was a frozen embryo at the time.

This happy ending is also a compelling beginning to *Embryo: A Defense of Life*, by Princeton law professor Robert George and University of South Carolina philosopher Christopher Tollefsen. Their premise is that baby Noah, born by Caesarean section on January 16, 2007, was and is the same *person* who was rescued (along with fourteen hundred other embryos) from a flooded fertility clinic sixteen months earlier. The authors make their case in the face of a contentious national debate on the ethics of embryo-destructive research. They attempt to do so without appeal to religious arguments, using the language of biology and philosophy. In this they mostly succeed, though this reviewer has a few misgivings.

This is a short book that can be read in a few sittings, and it is elegantly organized in a logical and stepwise fashion. The authors are careful to begin with core definitions. For example: '[A] human embryo is a whole living member of the species Homo sapiens in the earliest stage of his or her natural development.' (3) After an opening chapter that explains what is at stake in the embryo experimentation debate, a second chapter lays out the basics of human embryology, with enough detail to be satisfying but not technically overwhelming to the non-biologist. The remaining chapters are mostly philosophical, though based on a scientific understanding of the nature of embryos.

The authors make three important assertions about embryos that seem indisputable. First of all, a human embryo is a distinct entity from its mother or father, and it grows in its own distinct direction. Second, it

is genetically human, that is, it has a human genetic makeup. Finally, though immature and dependent, an embryo is a complete organism, capable of developing into an adult human with enough time and adequate nutrition. (50) These facts are independent of the process used to create the embryo, whether through natural reproduction, *in vitro* fertilization, parthenogenesis, or cloning.

The strength of these simple scientific givens lies in the example of Noah: as persons, all of us have continuity of essence, even if all of our body parts have been replaced over time by new constituent molecules. In other words, we are more than the sum of our parts. This idea of human *substance* goes all the way back to Aristotle, and was further developed by Thomas Aquinas, although it stands in contrast to reductionist tendencies in our modern day. We are by nature human animals that begin to exist at conception as embryos.

George and Tollefsen wish to reject all forms of dualism, including metaphysical dualism (e.g., the body/soul distinction), and ground the apparently transcendent nature of humans in their capacity for reason and freedom. (107) It is this, claim the authors, which separates humans from all other animal species. Human value obtains at every stage of development, not because embryonic humans can immediately exercise these capacities, but by virtue of the kind of beings they are.

Although this is a strong case philosophically, it is subject to criticism from those like Peter Singer who claim that because an adult baboon possesses more cognitive capacity than a newborn human baby, it has more value. George and Tollefsen must base their claim for human value on an indirect argument: the capacity to eventually exercise reason and freedom if given enough time and no interference. They make their case while rejecting metaphysical dualism and ignoring the *imago Dei* arguments of theism. To this reviewer, theirs is an unsatisfying basis for the ideas of substance and continuity that undergird their approach.

This concern notwithstanding, *Embryo: A Defense of Human Life* makes a powerful and compelling case for the unique value of human embryos from the moment of conception. It will help the defenders of life make their case against the utilitarian onslaught of embryo-destructive research and human cloning.

Reviewed by Dennis M. Sullivan, MD, MA (Ethics), Professor of Biology at Cedarville University and Director of the University's Center for Bioethics.

Flesh and Blood: Organ Transplantation and Blood Transfusion in Twentieth-Century America

Susan E. Lederer. New York, NY: Oxford University Press, 2008.

ISBN: 978-0-19-516150-2; 234 PAGES, HARDCOVER, $35.00.

Historical perspectives have an amazing ability to shed new light and meaning on common entities and techniques. Susan Lederer's *Flesh and Blood* is a historico-culturo-political examination of blood transfusion and transplantation that does just that. It is a cultural documentary— portraying changes in the social and political perspectives on these medical procedures—that raises questions of meaning for such present day concerns as xenotransplantation and nanotechnology.

Several ethical issues are particularly powerful. Lederer repeatedly raises the curtain on the drama of the movement of blood between bodies: blood transfusions were originally accomplished by surgically connecting the vessels of the living with the dying. Such drama is lost in our modern and technologically sterile use of 'blood products' 'banked' in 'bags.' Historically, blood was a source of both life and death. When successful, it effected a resurrection from the dead (consistent with the biblical declaration that 'life is in the blood'); yet it was also a source of illness and death from infectious disease (e.g. syphilis or AIDS) or blood type incompatibility.

Blood served as a source of identity during our racially charged past. Blood was not red, but 'black,' 'white,' 'Italian,' or 'Jewish.' While now known to be an unscientific anachronism, the power of that imagery persists, albeit diminished by the anonymity of banked blood. Lederer thoroughly documents the struggle to overcome prejudices concerning 'tainted blood': racially segregated blood existed in

some states until 1972. Bodily boundaries were also threatened as blood, skin, and body parts (testicles) were shared between races and species (animals) as well.

Commodification of the body developed insidiously as trafficking in body parts (particularly testicles) quickly became a reality. This is reflected in the language surrounding these practices: banks, deposits, withdrawals, markets. Ironically, this language appeared in the early 1930s, a time when these institutions proved wholly unreliable.

In Lederer's account, there is a striking difference in timbre between the medical innovations of yesteryear and today. It is obvious from her historical depiction that medical innovations were driven by desperation: frantic attempts to save a life. Today our innovations are 'tried and true,' driven by technological prowess rather than desperation. While such prowess is not an evil, the result is a loss of wonder in what we do every day.

Flesh and Blood, through its historical examination of blood transfusion and transplantation, illuminates the deeper meaning of medical practices that we take for granted daily – questions of the meaning of self, identity, and bodily integrity that pervade our technological procedures. The book is more historically descriptive than analytical or reflective (it uncovers fascinating issues without 'fleshing them out') making it ideal for a classroom setting where such excavating could be done as a group reflection on these issues. *Flesh and Blood* abounds in implications for today as we blithely set about to 'remake bodies through the harvest of other bodies – animal and human, living and dead.'

Reviewed by Susan M. Haack, MD, MA (Bioethics), FACOG, who is a consultative gynecologist at Hess Memorial Hospital and Mile Bluff Medical Center in Mauston, Wisconsin, USA.

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