Introduction

The goal of this article is to describe the relationship between the industrialization of medicine and medical professionalism, and bioethical critiques and its response. It describes what the industrialization of medicine is, how it affects medical profession, and how justice is a possible response.

Health care delivery system has changed as seen in the industrialization process. The traditional setting of medical practice has changed into large multi-specialty groups or for-profit organizations primarily operated by financially oriented professional manager. The milieu of medical practice has created the ethos of distrust in the physician-patient relationship due to erosive for-profit tendencies within the medical profession. Justice is a prerequisite for the formation of fundamental trust in the human relationship. The virtue of justice is the consistent desire to give all persons their due. In clinical practice, a covenant relationship is established between the physician and the patient. In this relationship, the patient obtains not only a positive right to receive a fair and just care as requested, but also a negative right to either refuse certain procedures or not to be manipulated by the physician. In the mean time, the physician incurs an implied correlative obligation, not only to give a promised care for the patient but also not to manipulate the patient or to prevent patient from receiving the requested care.

The virtues and character of trust and justice play a vital role in integrated medical ethics through the conceptual link with duties, rules, consequences and moral psychology. To remain a medical professional and to pursue the ultimate goals of medicine, namely the good of the patient, physicians need to reflect on the Oath they have sworn. At the same time, patients and society need to fulfill their obligations to act according to the principles and duties that will attain a desired model of the physician-patient relationship with just motivation. Medical professionalism can express its full potential in a society of industrialized medicine by these coordinated efforts among physicians, patients and society as a whole.

What is Industrialization of Medicine?

Industrialization, a part of a wider modernization process which includes technological innovation, is a process that generates social change and economic development, transforming a human group from an agricultural society into an industrial one. It is an extensive organization of an economy for the primary purpose of manufacturing. The accumulation of capital allowed the application of new technologies, which enabled the industrialization process to continue to evolve. The industrialization process formed a class of industrial workers who made more financially than others.

For centuries, religious faith was strongly related with health care in the Christian world.
As Western Europe recovered from World War II and during the 1950s in an era of prosperity, various forms of state-regulated and supported medical systems took place. At the same time, the dangers of the many by-products of professional dominance after World War II (such as increasing complexity, bureaucratization, and rationalization) were compounded by contemporary efforts by investors to corporatize medicine and by institutional payers, such as employers and governments to achieve more effective health care for less money.

The traditional setting where medicine was practiced in small groups or by select individuals transformed into medicine that is generally practiced by large groups, like multi-specialty groups or for-profit hospitals, and even larger multi-corporate health care organizations primarily managed by financially oriented non-physician professional managers. In the past, the physicians knew their patient’s families and their health problems very well. Now the public’s perception of physicians has changed as the physician is now a “stranger” providing a specialized service for profit managed by corporate managers, and sometimes viewed as double-agents promoting medical services, devices or pharmaceuticals for financial gain.

Physicians have a demonstrated affinity for commercial enterprises that increase revenues and that enhance their repertoire of medical instruments, devices, or drugs. This transition of practice settings has led to medical industrialization with even larger healthcare organizations primarily operated by non-physicians. Dr. Arnold S. Relman, the Editor Emeritus of the New England Journal of Medicine, speaks against commercialization of medicine. He claims that “the transformation of the U.S. health care system from a professional service for the sick and injured into one of the country’s largest industries to be the most important socio-economic change in the last half century of health care in our country”.

The health care industry borrowed concepts from economics and big business and produced managed care and managed competition. Health care became a competitive business in which large corporations typically win over their smaller competitors. The emerging medical industrial complex, the industrialization of medicine, has similar characteristics to industrial revolution in the reorganization of the function and influence of craft guilds and the dynamics of employment needs and employability in an industrial environment. Administrators of large corporate health care organizations, together with their related government planners, see these changes as a way to control the costs of and the behaviors associated with health-care delivery.

The consolidation of health-care into a few organizations tends to enhance the development of medical technology, and cost efficiency and high cost procedures demand that expensive machinery be centralized, which in turn permits standardized health care delivery. Accepting these terms as part of medicine has influenced and justified displacing physicians from their traditional decision-making roles in the provision of medical treatment and replacing them with non-physicians, frequently administrators with no health-care background at all, to make decisions based in part on non-medical factors like profitability, cost, insurability and liability.

Since World War II, technological innovation has transformed medicine in many ways. The triangular relationship among physicians, patients and illness has been damaged by several factors including technological evolution, public media, and cost-effective modalities. This phenomenon is closely related to quality and quantity of production and its economic return.

Medical technology and commerce have become partners based on a tightly bound complex relationship between science, government, private industry and the medical pro-
fession. The medical industry, like any other industry, wants to be free to sell its products, free to advertise and merchandise products and free to promote its self-interest while proclaiming its commitment to the altruistic values of traditional medicine. The industrialization of medicine has undoubtedly produced tremendous benefits such as the mechanization of healthcare delivery through physician profiling, practice parameters, care paths, and computer driven protocols which has generated useful data and favorable outcomes. However unfortunately, they are not without significant ethical implications. Daniel Callahan warns that “Cost control and particularly the management of technology will be painful, necessarily so. It will mean giving up some benefits long taken for granted. It will mean saying no on many occasions to doctors, to patients, to health care administrators, and to industry.” The sustained growth of biomedical research since World War II has helped to stimulate the public desire for longer, disease-free life. The medical industry, endlessly innovating its technology and aggressively selling its services, is a necessary condition for innovation, and it is physicians who seek and legitimize the use of technology. Biotechnology industries have lured academic scientists into their industry, many of whom themselves have become entrepreneurs, creating their own companies. These scientists, who have roots in a long tradition in medicine and biology for the sake of science or humanity, have espoused the fee-for-profit sector, making large amounts of money and accumulating wealth at the expense of the unfortunate, eroding the intellectual integrity of the research endeavor and distorting the relationship between science and public.

The resultant change in medical professionalism and vocation

These erosive for-profit tendencies within the medical profession have been multiplied by powerful forces within society. With increasing moral pluralism and moral heterogeneity in modern society, vocalization of spurious viewpoints by media and the internet, the secularization and weakening of religion as an ultimate source of morality and mistrust or distrust of authority have weakened the historical trust relationship between the physician and the patient. The most serious result of this deterioration of trust is the emergence of an ethics of distrust that ultimately destroys the very concept of the trust relationship with the professional physician.

In the 1960s and 1970s, the patient’s rights movement emerged in health care. With the rise of consumerism, the health care industry was increasingly depicted as an arrogant and impersonal bureaucracy from which patients, now called clients, deserved protection. Within this system, patient’s rights, especially the right to personal autonomy, needed as much protection as patient’s health. These new advocates defended the rights of their clients against overbearing traditional paternalism.

Modern medicine, as a result of the industrialization of medicine, has shown remarkable changes in various fields of the health-care system: medical technology, diagnostic and therapeutic innovation, patterns of medical practice, healthcare policy and the legal system. Among those, the physician-patient relationship, which we call medical professionalism, has shown the most dramatic changes. Escalating health-care costs, socio-political monitoring and cultural forces have forced the transformation of the physician-patient relationship into a provider-patient-government-third party payer relationship. This radical transformation of the traditional physician-patient relationship has created a sense of chaos and a loss of control for providers and recipients of medical treatment, especially with respect to the physician’s fundamental value of caring for individuals in society.

Medical professionalism is how physicians conduct themselves while serving patients and society in their roles as healer and medical scientist. It encompasses the values, attitudes, and behaviors inculcated by education and the daily experiences of the physician in-
Interacting with patients and fellow physicians. It is also influenced by the current social values and norms of the day. It serves as the infrastructure for the trust necessary to the physician-patient relationship. The physician possesses professional authority based on knowledge and expertise as a medical scientist. Patients benefit from this authority but are also vulnerable to its potential abuse. Professional self-interest has so captured the physician’s agenda that patients can no longer approach them with the traditional moral expectation that a patient’s interests will be paramount. Indeed, what amounts to an ethics of distrust has been gathering force. Today, the medical profession is confronted by two opposing moral imperatives: ethical codes conforming to the ethos of the marketplace, which legitimizes the self-interest of the physician over beneficence, at the expense of traditional virtues and medical ethics based on traditional virtues which impose specific obligations that forbid physicians to act primarily as businessmen, entrepreneurs, corporate employees or sales agents. Today, in the environment of industrialized medicine, the medical profession has changed its nature to embrace the ethos of the marketplace and self-interest over beneficence. Comparable to heeding the old marketplace adage “let the buyer beware,” the public naturally learns to mistrust the medical profession as a whole, and this mistrust threatens the professional model for physicians.

New role of physicians and bioethical implications

The role of the physician is to be an advocate for their patients’ health, and this advocacy is the central goal of the physician-patient relationship and treatment decision-making. The physician is a de facto “gatekeeper” who should be trusted to be the patient’s pleader and not simply an instrument of social, institutional, or fiscal policies. The covenant of trust with the patient compels the physician to use his medical knowledge and skill for the best interest of the patient. Trust is predicated on the integrity of the individual physician and the profession as a whole. Without this virtue, as seen in the relationship between the physician and the patient in the industrialized medical society, the relationship with medical professional cannot attain its highest goal. Philosophers stem from a variety of moral traditions, most usually a variant of act or rule-based deontology or consequentialism. Among these, the theory of prima facie principles provides fairly specific action guidelines and reduces some of the subjectivity that characterizes so many ethical dilemmas in clinical practice. These principles are identical to the Hippocratic ethics to act in the best interest of the patient and to avoid doing harm and have some advantage of compatibility with deontological, consequentialist theories and with some aspects of virtue ethical theory as well. In recent years, alternative ethical theories have been proposed to either complement or to replace the perceived deficiencies of the theory of prima facie principles. But any of these alternates will not be sufficient either to replace principles entirely or provide the conceptual ground of a comprehensive moral philosophy of medicine. The moral quality of human acts is determined by the character of the person who performs an analysis of the act. Character can direct the way we define a moral problem, and it selects and decides what principles and values are determinative in a given situation. The character of a physician, whether he is motivated by self-interest or altruism, makes a difference in evaluating the quality of the morality of his act. The character of the physician becomes a central point in the medical profession. Virtue ethics therefore must be restored as the keystone of the medical ethics.

In the context of medical professionalism, virtues can be seen as the orientation or disposition of character possessed by effective physicians that enable them to provide the work of medicine including its ends and purposes. However, teleological and theological ethical theories lost ground to science, and empiricism demonstrated what they could contribute to human knowledge using exper-
mental methods. With the growth of an ethically pluralistic and multicultural liberal society, the traditional classical concepts of virtue have been transformed into various anti-virtue ethical theories. There are too many different and incompatible conceptions of a virtue for there to be real unity of the concept or indeed to its history. In a current morally heterogeneous society, moral philosophy of medicine shows the wide divergence of opinion about determinants of an integral medical ethic.

The moral principles of medical ethics are statements of the good and the right that derive from the ends of medicine in a special kind of human relationship expressed as the physician-patient relationship. Physicians engage in the activity of medicine voluntarily and, in consequence, should commit themselves to the ends of medicine – healing, helping, and caring for patients. They are also committed to the principles that must guide medical acts if its ends are to be realized. Virtues confer the powers to make moral choices oriented to the proper ends of medicine. The virtuous person is virtuous with respect to this principle not only because he observes the principle, but also because he is habitually disposed to respect the principle with his intentions with respect to others and he is disposed to act as fully as possible in a way that we perceive to be consistent with what it is to be a good person.

Medicine is at its core a moral enterprise, and those who practice it are in truth members of a moral community. The Hippocratic Oath binds physicians collectively to the moral obligations of physicians and duties to individual patients. Society rests in part on the integrity of individual oaths. Thus, the physicians who have sworn this oath would have seen themselves dedicated to the trustworthiness that is necessary for the medical profession. The internal morality of medicine generates a strong moral bond and a collective responsibility among physicians. The fiduciary relationship between the physician and the patient in medicine confers to physicians special obligations to guide their conduct toward the true ends of medicine – the good of the patient – and thereby preserve the profession as well. If physicians are faithful to the moral obligations they share as a moral community, then it is clear that some of the role transformations of physicians due to the industrialization of medicine today ought to be rejected. Physicians must use their moral judgment and also support the most sensitive and responsible members of the profession.

The internal morality of medicine defines the principles and duties of the physician and those of the patient as well. The patient shares with the physician an obligation to act according to the principles and duties that will attain these ends with just motivation. Therefore, both virtuous physicians and patients can act well for a healthy physician-patient relationship and toward the desired ends of medicine. The good of the patient, the desired ends of medicine, becomes an important structure of the physician-patient relationship. Thus, an end-oriented beneficence model of the physician-patient relationship is in effect.

Can the virtue of Justice resolve the problem?

Justice is a prerequisite for the formation of fundamental trust in the human relationship. Justice is a fair, equitable, and proper treatment in light of what is due to persons. The virtue of justice is the consistent desire to give all persons their due. Justice is not only about the right way of distributing things but also the right way to value things. Standards of justice become necessary whenever persons are due benefits or burdens because of their particular acts or omissions. Our everyday life is pervaded by an unsettled concept of justice, where certain basic controversies cannot be rationally resolved. Our pluralist culture possesses no method of weighing and no rational criterion for deciding between claims based on legitimate entitlement against claims based on need. Contemporary society is characterized by conflicts that result from mutually exclusive viewpoints and abstractly conceived human rights without consideration of the common good. We cannot claim valid human rights in unconditional abstract-
ness, even if they are inalienable and undeniable in of themselves. The foundation, upon which a common idea of the good of humans could be based, can be established on the views of ethics by Aristotle and Thomas Aquinas. The human good is excellent activity in accordance with the best (aristoi) and teleiotatos rational elements. All human beings, qua human beings, according to a developmental interpretation of the function argument, have an ultimate object of desire and therefore a calling, namely, to flourish and to be happy. The fundamental tendency of living human beings, animal organisms, is the tendency to eudaimonia, to our flourishing.

Rights are described as justified claims that individuals and groups can make on other individuals or on society as either a positive right or a negative right. The principle of justice is the principle of symmetrical legal rights on the basis of the acknowledgment of one’s fellow man as one like me, and thus an equal with me. Peaceful society requires justice that protects legitimate self-interest. Justice is a claim we have on the community, which is compliance with an obligation of communal living. In its highest expressions, it might be justified as owed to humans because they are worthy of respect and dignity. Within the physician-patient relationship, a firm but untidy correlation exists between rights and obligations. When a patient requests and a physician agrees and accepts a person as a patient and commences treatment, a covenant relationship is established between the physician and the patient. In this relationship, the patient obtains not only a positive right to receive a fair and just care as requested, what the physician promises to provide, but also a negative right to either refuse certain procedures against the physician’s recommendation, or not to be manipulated by the physician. In the mean time, the physician incurs an implied correlative obligation, not only to give a promised care for the patient but also not to manipulate the patient or to prevent patient from receiving the requested care. Conflicts of interest may occur between the rights of the physician and the rights of the patient. However, it is considered that rights are prior to obligations in the order of justifying purpose in that respondents have correlative obligations because subjects have certain rights.

To be morally responsible, to act freely or autonomously, a human being should be respected for its dignity. The patient holds the right to be respected as a rational being, bearer of humanity, capable of reason, and autonomous being. Kant gives an instance of humanity for formulation of the categorical imperative. He says humanity has an absolute value as an end in itself. “I say that man, and in general every rational being, exists as an end himself, not merely as a means for arbitrary use by this or that will.” The patient has a right not to be manipulated by the physician as a means to promote the self-interest of the physician. In other words, the physician has an obligation to respect the dignity of the patient as a human being. As a result, if the physician acts for his motives of inclination, self-interest, desires, or preferences, his action is not morally worthy.

Morality is not about maximizing our happiness or any other end but respecting persons as ends in themselves. Therefore, the utilitarian theory of maximizing welfare and the approach of the moral desert of promoting virtue should be rejected. Instead, a theory of justice and a morality to freedom must be prevailed. Morality of an act consists in the intention, means, circumstance and end of the act, and their inter-relation. The goodness of every element needs to be examined for morality of an act. As to the intention, the motive that confers moral worth on an act is the motive of duty that is doing the right thing for the right reason, not for some other motive.

Although, there is much confusion and conflict in various aspects of medical ethics, there is more hope for the grounding of principles, rules, virtues, and moral psychology in medical ethics than in any other field of ethics. The virtues and character of trust and justice play a vital role in integrated medical ethics through the conceptual link with duties, rules, consequences and moral psychology. To remain a medical professional...
and to pursue the ultimate goals of medicine, namely the good of the patient, physicians need to reflect on the Oath they have sworn. Health belongs to the fullness of the good of being alive, being what St. Thomas calls “the natural good of the human body.” Health is about a condition of the human body, its being in good order as an organism. Well-ordered functioning of the human organism is a basic human good of health. Organic well functioning is a perfect end of the human being which is intrinsic to the organic constitution of human beings. The human being possesses a nature teleologically ordered to a fulfillment or perfection which constitutes eudaimonia.

As a result, medical professionalism is expressed in the physician-patient relationship. At the same time, patients and society need to fulfill their obligations to act according to the principles and duties that will attain an end-oriented beneficence model of the physician-patient relationship with just motivation. These coordinated efforts among physicians, patients and society as a whole can strengthen the traditional trust relationship between the patient and the physician in an industrialized medical society. Ultimately, medical professionalism can express its full potential in a society of industrialized medicine.

**Conclusion**

This article demonstrates that the industrialization of medicine has transformed the healthcare delivery system from select individuals or small groups to larger groups seeking their own financial interests or managed care organizations operated by financially motivated non-professional corporate managers. The physician also has transformed from a trusted patient’s advocate to a stranger seeking financial gain in an industrialized medical society. These have transformed the original physician-patient relationship to a provider-patient-government-third party payer relationship. As a result, the traditional trust relationship between the physician and the patient has been weakened. The virtues and character of trust and justice of the physician and coordinated efforts among physicians, patients and society as a whole can strengthen the traditional trust relationship. As a result, medical professionalism can express its full potential in the industrialized medical society.

**NOTE**


3. See J.C. Robinson, «Consolidation of medical group into Physician Practice Management Organizations», *JAMA*, 279/2 (January 1998), 144-149. Between 1994 and 1996, medical groups and independent practice associations (IPAs) affiliated with 3 physician practice management (PPMs) in California and New Jersey grew from 3787 to 25763 physicians; 65% of employed physicians provide primary care, while the majority of contracting physicians provide specialty care. Patient enrollment in health maintenance organizations (HMOs) grew from 285,503 to 3,028,881. Annual capitation revenues grew from $190 million to $2.1 billion. Medical groups affiliated with PPMs are capitated for most professional, hospital, and ancillary clinical services and are increasingly delegated responsibility by HMOs for utilization management and quality assurance. He comments that physician practice management organizations and their affiliated medical groups face the challenge of continuing rapid growth, sustaining stock values, and improving practice efficiencies while maintaining the loyalty of physicians and patients.


5. See *National Institutes of Health, NIH Data Book: 1988*, National Institutes of Health, Bethesda, MD 1988, 1. Between 1979 and 1987, there was a 180 percent increase in total health care costs and an 180 percent increase in health research and development. See also C.N. Peterson, «The Clinical, Intellectual, Ethical and Political Costs of Biomedical Research», *Health Affairs* 5/2 (May 1986), 87-95, at 87; H.J. Aaron, «Questioning the Cost of Biomedical Researchs», *Health Affairs* 5/2 (May 1986), 96-99, at 96.

14 H. May, Aristotle’s Ethics, 28, 31. Calling, a special kind of wish, is the efficient cause of the various “inner resources” that comprise the other components of the craftsman’s motivational system.
15 See T.L. Beauchamp - J.F. Childress, Principles of Biomedical Ethics, Oxford University Press, New York 20096.
18 See L. Gormally, «The Good of Health and the Ends of Medicine…», 276-278.