

THE CODE OF ETHICS OF THE MEDICAL PROFESSION:

A HISTORICAL AND SOCIOLOGICAL STUDY

Kamal Y. Sekla, M.D.

A Thesis

in

The Department

of

Sociology

**Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts at
Concordia University
Montréal, Québec, Canada**

September 1982

(c) Kamal Y. Sekla, 1982

ABSTRACT

THE CODE OF ETHICS OF THE MEDICAL PROFESSION: A HISTORICAL AND SOCIOLOGICAL STUDY

KAMAL Y. SEKLA

The present thesis is an endeavour to show that medical codes of ethics - as other professional codes - periodically emerge or sustain modifications and that these recurrent concerns of all cultures and ages are neither spontaneous phenomena nor idiopathic trends, but can be ascribed to identifiable sociological factors. The study explores, establishes and verifies, a reasonable link between the conception of a new code or the decision to modify it, and changes in knowledge, social institutions of religion and law, as well as cultural, socio-economic and political factors. It tries to identify the factors, which, at a given time, lead a profession, with strong and long-standing foundations, to rethink or revise its code of ethics; it also attempts at finding a relation between certain types of social changes and the appearance of such a concern. It verifies if the mechanisms underlying decisions of change have something to do with the social and economic environment or background, and also, if the way a code of ethics is interpreted and if the decision to change it are related to the way the profession is perceived in its very relation with society, this perception subsuming concepts of professionalization and deprofessionalization, bureaucratization and debureaucratization.

TABLE OF CONTENTS

INTRODUCTION

PART I. HISTORICAL STUDY

I.	WHAT IS THE CODE OF ETHICS - DEFINITIONS AND DISTINCTIONS ..	1
II.	FORMS	3
III.	THE CODE OF HAMMOURABI.....	4
IV.	THE EGYPTIAN TRADITION	5
V.	THE JUDAIC TRADITION	6
VI.	ISAAC ISRAELI: FIFTY ADMONITIONS TO THE PHYSICIAN	12
VII.	THE DAILY PRAYER OF A PHYSICIAN, ATTRIBUTED TO MOSES MAIMONIDES	17
VIII.	THE HIPPOCRATIC OATH - PAGAN, CRUCIFORM - ELIZABETHAN VERSIONS	19
IX.	EARLY MEDIEVAL MANUSCRIPTS - THE BAMBERS'S MANUSCRIPT	28
X.	FREDERICK II MEDIEVAL LAW	31
XI.	MODERN CODES	
	- Thomas Percival's Code 1803	34
	- North American Medical Ethics	38
	- The American Medical Association Code 1847	39
	- The American Medical Association Principles 1903	42
	- The American Medical Association Principles 1912	43
	- The World Medical Association Code - Geneva Declaration 1948	44
	- The American Medical Association Principles 1957	46
	- The Nuremberg Code 1947	47

PART II. THE SOCIOLOGICAL BASIS OF MEDICAL ETHICS

I. RELIGION AND MEDICAL DEONTOLOGY

- Priests-Physicians in History	50
- The Meaning of Codes Absence	51
- Ancient Egypt	53
- The Judaic Tradition	53
- The Hellenistic Tradition	55
- The Islamic Tradition	58
- The Christian Era	59
- New Problems in Medical Ethics	62

II. THE LAW AND MEDICAL ETHICS

- The Code of Hammourabi 66
- Frederick II Law for the Regulation of the Practice of Medicine 67
- Modern Law and Important Issues - "The Moment of Death" 68
- Are the External Tests of Death Infallible? 69
- Law and Decision-Making 72
- Concerning Euthanasia 73
- The Stand of the American Law Concerning Euthanasia and Suicide 74
- Elementary Human Rights and Medicine 76

III. KNOWLEDGE AND MEDICAL DEONTOLOGY

- Development of Medicine 78
- Ancient Egypt 78
- Babylonian Medicine 79
- Judaic Medicine 80
- Greek Medicine 81
- Roman Medicine 84
- Medieval Medicine 85
- The Renaissance Medicine 87
- Seventeenth Century Medicine 88
- Eighteenth Century Medicine 89
- Modern Medicine 90

IV. THE SOCIO-ECONOMIC BACKGROUND AND MEDICAL DEONTOLOGY

- Preamble 93
- Professionalization of Medicine 96
- Characteristics of a Profession 97
- Model of Professionalization 101
- Deprofessionalization of Medicine 103
- Bureaucratization of Medicine 104
- Nature of Authority 105
- Authority among Doctors 106
- Debureaucrization of Medicine 107

CONCLUSION 108

BIBLIOGRAPHY 116

INTRODUCTION

I

From the shamanistic tradition of preliterate societies to the sophisticated computerized medicine of present times, from the code of Hammourabi (2000 B.C.) to the Hippocratic oath, there has been a sustained and universal concern to surround the medical performance by a complex network of "rules of behaviour", thereby ensuring a highly moral, humane, and civil quality to the relationship between the physician on the one hand, and his patients, colleagues and society as a whole, on the other.

As it deals essentially, with man, and primarily, with life and death, one would assume that this "code of ethics" should have been, once and for all, clearly defined, and, thereafter, strictly observed. Instead, it has evolved in an "unwritten constitution", constantly acquiring new implications, periodically questioned by emerging ideologies and trends, and repeatedly reconsidered in the light of needs and goals. Torn between the conflicting interests of different groups and institutions, it is continuously reshaped by men and times. In fact, as any mental construct, it reflects, in its variability, a changing society.

Foremost, in the physician-patient relationship, stands, unequivocally, the physician's concern about life and his commitment to protect and preserve it. Yet, contemporary society is plagued by raging controversies concerning abortion, contraception and euthanasia - to cite the major ones. To re-define stands, it has been mandatory to re-define,

fundamentally, life and death, not only in terms of ideology, but basically, in terms of factual knowledge and precise science, a field that has been subject to more rapid and dramatic change than any other. Furthermore, determination of a quality of life that would justify its preservation, is increasingly establishing itself as the avowed criterion and the overt motto of a society, geared around increasing needs and consumption and obsessed by the danger of overpopulation. Advocating the freedom of women "to use their bodies without necessarily suffering any physical, social, economic or professional handicap or prejudice", some feminist movements insist on assuming the exclusive right of decision and responsibility of pursuing pregnancy or terminating it. A relatively related problem is that of congenital anomalies and deformities - a not infrequent medication hazard, in recent years (e.g. the thalidomide babies). Artificial insemination, test-tube gestation, organ-grafting (possible brain graft, in the near future), as well as experimental medicine and psychiatry, are but some of the arenas where proponents of "the end justifies the means" policy clash with those of the absolute and inalienable "right to life".

Implicit, for ages, in most codes of ethics, the commitment to attend any ailing person, without consideration to any material or time contingency, is seriously dwindling and fading away. Today's organized practice has, for the convenience of the physician and structured bodies, restricted both the time and location of the physician's availability.

The information provided by the patient or his relatives occupies no second place and dealing with it has been, in the past, a very strict and non-negotiable stand. The physician was unconditionally committed to preserve the confidentiality of his patient's health problems. Today, unfortunately, insurance companies, employers, schools, etc. strive to accommodate their interests at the expense of the once revered confidentiality and succeed even, to convince the public opinion of the opportunity and justifiability of their unorthodox ways. For socio-economic and political goals, are the new "rules of the game" unscrupulously changing the sacred law?

To curb costly "shopping around" by the patient, for statistical purposes or even for corporational control, is it ethical to disregard and violate medical confidentiality? There could hardly be a more vital question, for what is at stake is no more, no less than man's life - physical and moral. Perhaps less emphatically stressed is the relationship between the physician and his colleagues, the interprofessional ethics. In no other profession, do we find more than one professional involved in the same problem. Increasing specialization and sophistication is an inherent characteristic of a rapidly expanding medical science. The general practitioner is the usual referring party, but any specialist will eventually need the opinion of an internist or another specialist and the surgeon is, of course, dependent on the anesthesiologist, the cardiologist and the radiologist. Courtesy, in the consultation process, should imply both form and content. Taking into account the consultant's opinion and an educated discussion of the case, aiming, ideally at a consensus, should precede conveyance of the medical opinion to the patient.

Exchange of information, concerning innovative techniques and scientific discoveries is a must, from a humanitarian perspective and for the advancement of knowledge. This should extend to involve not only fellow practitioners of the same community, but should also transgress all frontiers to reach the international level. No place should be left for chauvinism in the medical profession.

In the past, an unfortunate hostility marred the relations between physicians and surgeons of the University of Paris - the famous celebrated "war of the long robes and short robes". But, since then, a fairly continued tradition of mutual respect has been established and has become, so to speak, a universal rule. In the well structured medical organization of contemporary society, correct interprofessional ethics tend to become a "second nature", or almost.

So far we have dealt with individual relations, but the medical profession, as a whole, has specific involvements with the community, both local and international. With the former, it has to carry on its general commitment to protect life and the quality of life, by ensuring a favourable environment. Pollution problems, hygiene conditions as well as urban regulations, are becoming increasingly a field of concern, and, some times, of arduous debate between the medical profession. on the one hand, and politicians, economists and jurists on the other, Scientific integrity for the sake of better health conditions, should be more than a priority. In all times and places, it is the one and only aim.

V

On the international level, the medical profession is not only dedicated but committed to protect the life of the wounded and to attend to their condition. This has cristalized in the creation of the International Red Cross Society and its rapid recognition by most countries. At first designed to deal with war casualties, it has progressively lent its far-reaching means to other fields of disaster as earthquakes, hurricanes, etc. Here, more than ever, the fundamental ethics commands an absolute apolitical state of affairs.

At the turn of the century, William Osler, seeking to understand the meaning of human existence, turned to the history of medicine and philosophy to find out when and where the idea originated that medicine itself imposes certain obligations upon the physician, convinced as he was, that his creed of philanthropia and philotechnia (love of humanity and of one's craft) took its origin, long ago, in the ancient Greece.

The concern about the historical development of medical ethics, and their codes is more justified now than ever before, and for more serious reasons than administrative or philosophic considerations. It is true that "codes of ethics" are not the exclusive monopoly of the medical field. They might have started in this particular domain, for one obvious reason, that it has always been vital to man, literally revolving around "a matter of life and death". But it covers, now, most of the fields which deal with the human being, either individually or in group, and where, physical, mental or moral harm, either has been reported in the past, or can be foreseen in the future.

Thus, it has been necessary to institute ethical codes for political science, psychology, sociology, etc. The latter's code (A.S.A. 1973 Code) has provoked numerous complaints of students about its inadequacy or its lack of attention to ethical considerations in teaching, as reported by Galliher (1975), who has attempted to understand this omission and attend to it. He had the merit of stopping and realizing honestly that it never occurred to him that the code dealt only with research activities and did not extend its coverage to students - "human beings, and the major client group". If such is true of the sociology code, and if Galliher's attempt is quite justifiable, one must admit that the Medical Code of Ethics, deserves and requires, at least the same treatment.

Codes of ethics are not, and have never been, rigid frames. They have evolved and changed with the changing social needs, structures and ideologies. In this, they have but followed and been subject to the "Golden rule" governing all fields of human achievement. But medicine and medical practice face more problems and more challenges. Thus:

1. Changes in medicine are definitely more vital to the human being.
2. These changes are occurring in a deeper plane, at a faster rate, and in more complex matters than in other professional fields.
3. The adaptation of codes to changes is always a lagging process. This is due to reluctance to change long-established rules, time-consuming methods to study the needs and devise the appropriate modifications.

4. Actually, two opposite trends are not only forecasted, but already "being born", incredibly enough, in the same society. Thus, in North-America, the traditional, "physician-centered" health - delivery system did not only change to the "team-centered" system, but, in some futurist centers, is already becoming a "computer-medic" system, relying on the computer for diagnostic and therapeutic decision making, and a team of non-medical personnel for the actual-mechanical-carrying out of the medical acts, leaving to the physician, the role of coordinator-supervisor.

On the other hand, a growing number of patients, resenting the de-humanized computerized medicine and even the group-practice medicine and the large hospital centres, are favouring the return to traditional medicine. Homeopaths, herbalists, chiropractors, etc. are flourishing again. It is probably no coincidence that the W.H.O. has, for its part, initiated research procedures in certain African states, as the Zaire, for the recognition and legalization of the traditional medicine, which is seeking, and is probably on the verge of receiving, an official status, and, even, a code of ethics of its own. Thus, two different trends, although incompatible and uncompromising, do co-exist.

The purpose of this study is to show that medical codes of ethics - as other professional codes - periodically emerge or sustain modifications, and that these changes and this recurrent concern of all cultures and ages are not spontaneous phenomena, but that they can be ascribed to identifiable

sociological factors. It will thus seek to explore, establish and verify a reasonable link between the conception of a new code or the decision to modify it and changes in knowledge, social institutions of religion and law, as well as cultural, socio-economic and political factors.

It will try to identify:

- the factors which, at a given time, lead a profession with strong and long-standing foundations to rethink or revise its code of ethics;
- the relation between certain types of social changes and the appearance of such a concern;

It will also endeavour to verify:

- if the mechanisms underlying decisions of change have something to do with the social and economic environment or background; and also:
- if the way a code of ethics is interpreted and if the decision to modify or change it are related to the way the profession is perceived in its very relation with society, this perception subsuming concepts of professionalization and deprofessionalization, bureaucratization and debureaucratization.

This will entail:

First, observing the historical evolution of the codes of ethics and identifying the changes that have occurred, over the centuries, in the various rules of behaviour governing the relationship between the physician, on the one hand, and his patients, colleagues and society, on the other hand.

Second, investigating the causes of these changes, by relating them - chronologically - to changes in terms of knowledge, religion, law, cultural and socio-economic factors, and assessing the relative importance of each individual factor in the causality of change.

The proposed study is thus conveniently divided into two main parts:

Part One is devoted to the historical evolution of the medical codes of ethics through times and cultures. It is not intended to be an exhaustive compilation of historical facts but rather a reasonably generous selection including the most important codes which are thought to constitute landmarks or milestones along this long journey in time. The selected codes have also the advantage of belonging to or of being issued from cultures that lend themselves to a comprehensive analysis of all their social elements. This factor is essential to provide a sound basis for the understanding of the link between these social factors and the corresponding codes of ethics.

It has also been found convenient, to divide the first part into several sections. It starts by a preamble which exposes and explores the distinctions between ethics and etiquette, not only linguistically, but also historically. Then the different forms of codes of deontology are described, from oaths, to admonitions and from precepts to laws and to various formal and informal codes. Next, these different forms are considered in detail, and in a sequential order:

- The Code of Hammourabi
- The Egyptian Tradition
- The Judaic Tradition

- Isaac Israeli's fifty admonitions to the physician
- The daily prayer of a physician by Moses Maimonides
- The Hippocratic oath
- The Hippocratic oath as a christian physician may swear it
- The 16th C. Elizabethan versions of the Code
- Early medieval manuscripts - Bamberg's
- Frederick II laws (1240-1241)
- Thomas Percival's Code of Ethics
- A.M.A. Code of Ethics
- A.M.A. Principles of Ethics (1903)
- A.M.A. Principles of Ethics (1912)
- The Nuremberg Code of Ethics (1947)
- The 1948 Geneva Declaration (W.M.A. Code)
- The A.M.A. Principles of Ethics (1957)

PART TWO - deals with the different social factors and institutions related to the practice of medicine and tries to determine how the changes witnessed in them result in corresponding changes in the medical codes of ethics.

It has been divided into four main sections:

Section A considers religion and the Code of Ethics -

After reviewing the particular history of the "marriage" of religion and medicine, and the role of priests-physicians through the ages, it deals with the meaning of code-absence in certain epochs and their substitution by religious precepts. Each tradition is then examined, respecting as

much as possible, a chronological order: the Egyptian, Babylonian Judaic and Greek, then the early Christian, Medieval, Renaissance, the 17th and 18th centuries and, finally, modern times. In each tradition, we will explore the link between systems of beliefs and prescribed rules of behavior for medical practitioners. In one case, the classical Greek period, we will deal with philosophy since it almost replaced religion in its influence on social life. And to make the test, so to speak, more valid, we consider, at the end, the state of affairs in an atheistic society - the Russian - to see how this could affect medical deontology.

Section B, deals with the law and medical ethics.

It starts by describing the Code of Hammourabi - the oldest code of jurisdiction in history - and shows how the Babylonian medical practice reflects the very spirit of the Babylonian laws. Then, Frederick II laws are examined and their effect on the regulation of medical teaching and medical practice described. The absence of special jurisdiction for extended period is explored and explained. Important issues in Medical Ethics are, then, reviewed in detail. The legal determination of the "moment of death" and the many problems associated with decisions around this moment are carefully analyzed, insisting on the problem of the irretrievably unconscious patient and the utilitarian considerations recently invoked. The ambivalence between the claims of the society and those of the individual is explained. Two problem cases - the Potter case and the case of the drowned boy, almost historical cases - are used to illustrate the fallability of the external tests of death.

"Law and decision-making" is then dealt with, and euthanasia is considered in a historical perspective which extends to the attempts at introducing "legal" euthanasia in the United States. The stand of the American law concerning euthanasia and suicide is then analyzed, and the new trend or philosophy of Pragmatism defined. Finally, the elementary human rights - right to privacy, to body-integrity, to health and to freedom - are examined in relation with specific changes and additions to the rules of behaviour of the medical practice.

Section C is devoted to knowledge and medical deontology.

It unfolds, again the historical perspective of the different cultures: the ancient Egyptian civilization and its theory of the pneuma, its two papyruses - the Eber's and the Edwin Smith. Follows, the Babylonian medicine, with its two levels of practice, the Judaic tradition with its absent "directive line" or basic concept, the Greek medicine - both pre-Hippocratic and Hippocratic - the latter comprising Hippocrates' humoral theory and Aristotle's soul theory. The Hippocratic oath is, then, carefully examined with its implications of knowledge. The Roman medicine is next studied, with its codification of medical knowledge, its organization of medical practice and its different medical sects - dogmatists, pneumatists, empiricists, methodists and eclecticists. Medieval medicine follows, with its dogmatic religious scholasticism, its university teaching and its religiously - directed hospitals. Next, the Renaissance period is discussed and the relaxation of the religious grip over science and medicine stressed. The 17th and 18th centuries follow, with both their discoveries and the

contrast or lagging between medical science and medical practice, and finally, modern medicine, with a long list of new discoveries, but also of new problems of medical ethics, in innumerable fields - family planning, genetic engineering, organ transplant, artificial insemination, test-tube gestation, etc.

Section D: deals with the socio-economic background and medical deontology.

It is sub-divided into five-subsections:

Subsection 1: considers how medicine and the medical profession are perceived both by the physicians and society at large;

Subsection 2: is devoted to professionalization of medicine. It explores the concept of profession and professional and the process of professionalization, both in its historical and ahistorical approach. The characteristics of a profession are then discussed and Denton's model of professionalization is exposed, along with its attributes, statements, about changes within occupations and potential consequences attached to the professionalization phenomenon.

Subsection 3: deals with deprofessionalization of medicine and its possible causes.

Subsection 4: discusses bureaucratization of medicine, why it has been felt necessary to introduce it, what it means exactly and how it functions. Hierarchy and authority are, next, considered, particularly in the context of medical practice and the hospital setting. And,

Subsection 5: examines the suggestion put forward by some observers - as Illich and Zola - of a debureaucratization of medicine and the deregulation of its practice, on account of what they label "iatrogenesis".

PART I - A HISTORICAL STUDY

WHAT IS THE CODE OF ETHICS

Definitions and Distinctions

The term "Medical Ethics", introduced by Percival, "is rightly labelled a misnomer" by Leake (1927). Derived from the Greek "ethikos"- it means "concerning the moral". But, as used by ancient Greeks, and in Percival's Code of Ethics, it refers chiefly to the rules of etiquette, based on traditions of good taste. These are concerned with the conduct of physicians towards each other and embody the tenets of professional courtesy.

"Medical Ethics", in the proper sense of the term, are for their part, concerned with the ultimate consequences of the conduct of physicians toward their individual patients and toward society as a whole. In north-American codes, it also includes the duties of the patient towards his treating physician and of society towards the profession as a whole. It should include, also, a consideration of the will and motive behind this conduct.

Medical ethics and medical etiquette stem from and reflect two different ethical positions. The former express idealism which stresses the interests of humanity as a whole and is concerned with the furtherance of the welfare of society. The latter materializes hedonism, which emphasizes the interests of individual selves and is concerned with personal pleasure.

These two ethical positions are evidently difficult to compromise. But, as in the evolution of society, major issues of literally vital importance keep recurring, certain rules of conduct and behavior have been adopted, when experience proved they could actually safeguard both the interests of humanity and those of individuals. These, basically, form the body of law to be found in most societies. A further compromise was established according to the utilitarian concept - mainly in Protestant ethics - which advocates "the greatest good for the greatest number", although it is considered by some as only a calculated hedonism.

Underlying both the position and its expressed concern, a structural dichotomy can be clearly conceptualized, with a mediator position intervening between its two poles. This dichotomy can be paralleled, on several planes, as in the following:

Idealism - Hedonism	Life - Death
Ethics - Etiquette	Health - Disease
Philanthropia - Philotechnia	Body - Soul
Society with Code - Society with no Code	Physician - Priest
Medieval ethical thought	- Contemporary ethical thought

Intervening mediator positions can be easily demonstrated. In the first pair, utilitarianism is the appropriate choice. For the other pairs, although not labelled, mediators do exist and can be illustrated by comparative analysis between different schools of thought as expressed

in their writings and treatises: The Salerno treatises for medieval thought, Percival's code of modern thought and Samuel de Sorbière's for the Renaissance - the first two representing the two poles and the latter, the mediator. Between cultures or societies with no code (s) and cultures with written code (s), one can place cultures with an unwritten code.

It would seem that for one dichotomy, though it is hard to think of an "honest" mediator: in fact, "moral" and "good" are the two poles of this "human society aim-of action" dichotomy. May be (this is the reason why, deliberately or not, society, sometimes fuses them, but more often than not, confuses them, with the seldom convincing justification, that the concepts of "moral" and "good" are, both, relative and changing.

FORMS

The rules of conduct and behavior which different cultures devised to deal with the major issues they all faced, since the dawn of times, have not always been embodied in clearly defined codes. They have assumed many forms, ranging from advices, admonitions, prayers, oaths, to treatises, manuals of ethics and formal codes (local or national). Since a full understanding of the present state of affairs of the medical code of ethics can be best attained by an exploration of these various forms which can be rightly considered as important milestones in its successive stages of development, I will attempt to consider, successively:

- 1) The Code of Hammourabi
- 2) The Egyptian tradition
- 3) The Judaic tradition (Talmudic and medieval)
- 4) The Hippocratic Oath (original and subsequent versions)
- 5) The Salernitan treatises
- 6) Renaissance ethical writings
- 7) Thomas Percival's Code of Ethics - 1803
- 8) The A.M.A. Code (1847) and its subsequent modifications
- 9) Additions to the International Code (the Nuremberg Code - 1947)
- 10) The Geneva Declaration (1948)

According to Ezioni (1973: 6-7) even negative findings are important, i.e. the absence of oaths in certain civilizations is an important phenomenon.

THE CODE OF HAMMOURABI

Edicted by Hammourabi,king of the Babylonians - a semitic people who established a kingdom in Mesopotamia, which they captured from Sumerians around 2000 B.C. - this is the earliest code known. Of the two hundred and eighty two (282) paragraphs of this system of law, eight are concerned with medical practice and refer to:

- 1) The fees of the physician
- 2) The penalty incurred in case of injury of the patient (malpractice).

It is stated that, if a physician saves an eye, which was threatened by an abscess, he will receive ten silver coins - these are reduced to two only, if the patient is a slave. Should the eye be punctured, the physician will have the hands cut, if the patient is a free man. But if the patient is a slave, he will pay, in money, a fine corresponding to half the price of the slave. However, the preceding fees and fines or penalties apply only to surgeons and barbers, physicians being left free i.e. physicians are not subject to the code (Boissou, 1967:18). Several interesting conclusions can thus be drawn from this relatively distant precursor of the medical code:

- 1) The fee - scale was graded according to the social status of the patient, a practice followed centuries later and reflected in certain social security scales.
- 2) The penalty or punishment in case of harm done to the patient is the earliest form of "malpractice regulation or control".
- 3) A distinction was already drawn between physicians, surgeons, barbers, herbalists and dieticians, both in social and legal status, the physician occupying a higher social status and enjoying privileges denied to the others. Such a distinction was still found in the Renaissance period and accounts for "the war of the long robes and short robes" among the members of the dignified "Faculté de Paris".

THE EGYPTIAN TRADITION

Although definite proofs of its advanced standard and its rich

technology and skill can be found in the temple drawings and in the Eber's papyrus relatively few facts are recorded - concerning the rules regulating medical practice (Upjohn: 1965, 93). Nonetheless, it is interesting to note that, in this medicine of the 2nd or 3rd millennia B.C., there existed:

- 1) An established division of specialities, not only to internal medicine and surgery, but up to "organ speciality".
- 2) An "industrial medicine", and where important building projects are carried on, an "accident medicine" (traumatology).
- 3) The fees of the physician are paid by the state - a precursor of socialized and state medicine.
- 4) Free treatment of the soldiers.
- 5) A form of malpractice in the sense that a physician was bound to prescribe, not what he wanted, but only that "known physicians of the past, i.e. masters" had advised, failing which, a physician could risk the death penalty.

THE JUDAIC TRADITION

There is no legal code as such of medical ethics in the Judaic tradition, but references to physicians and medical practice are numerous in the Talmud, both in the Babylonian (Bavli) and the Jerusalem (Yerushalmi) texts, the writing of which spans the period between the 2nd century (B.C.) and the 6th century (A.D.). The medieval Jewish

thought is illustrated by Isaac Israeli's "Fifty Admonitions to the Physicians" and Moses Maimonides' "The Physician's Prayer".

Talmudic References:

An overall view of the Talmudic texts displays a general theurgic character which excludes everything that does not fit or, so to speak, espouse the religion. God is omnipresent and His justice is ubiquitous. One would almost sense a reluctance to interfere with God's plans, as expressed in the following "warning" from the "Book of Kratnae":

"He who has deserved corporal chastisement falls sick and is not cured until he has suffered the full measure of the punishment meted out to him. The doctor should therefore see to it that the patient should pay the penalty and be freed".

This role is not, however, the only one proposed by the Talmud. David Margahith (1977 :9) identifies two different models of the physician, in the Scriptures: Kratnae (the divine doctor), executioner of the verdicts pronounced by the Heavenly court (physical disabilities, death sentences, and Abba Umana, the pious man, advocating strict modesty with women, decency in money matters with the poor and courtesy with fellow physicians.

This "moral" differentiation does not reflect a concomitant professional one. There is no discriminatory classification based on specialization. At most, one can feel a differentiation in role between physician and dispensing chemist or herbalist:

"Therewith, the doctor heals the wound, the chemist makes up the prescription".

A role in which each one is trusted and respected. The status of the physician is a very honourable one as he is considered to be endowed with divine wisdom:

"My son, should you feel sick, place yourself in the hands of a doctor, for this is His calling and God has given him of His wisdom". - (Ben Sira, 28)

The patient is repeatedly enticed to trust the physician, as reflected in the following advices of Ben Sira (30):

"The Almighty has created healing substances to grow from the earth, and the wise man knows their functions".

Any doubt in the physician's ability is strongly discarded:

"The doctor has been allowed to attend the sick, and one should not say: The Almighty has inflicted the wound and shall the doctor be able to heal?" - (Exodus, 20,19).

Contrasting to this attitude, is a mistrust of the foreign physician, as evidenced by the statement that: "The doctor who comes from afar is like a blind man". - (Bakama, 85).

In the Jewish tradition, medicine and religion are blended. Since antiquity, most rabbis are physicians and vice-versa. Isaac Israeli and Moses Maimonides are considered by Jewish ethical writers and historians as excellent talmudists. This probably accounts, at least

in part, for the high esteem in which they are held and for the revered position enjoyed by the "sage physician" in all times. This, however, does not exclude a severe control of malpractice, as can be evidenced by the warning that:

"He shall make no mistakes, for should he err but once, the Almighty will regard it as if he had shed blood and killed his patient". - (Deutoronomy, 32, 10).

in which case, the "lex talionis" would be rigourously applied. Being a "man of God", the doctor is expected and urged to be righteous and God-fearing. His duties are, however, a priority, and he is urged to perform a caesarian section, even on Sabbath to save a living child:

"Should a woman die in labour on Sabbath, a knife shall be taken and her belly cut and the child taken out". - (Araki, 7).

This emphasizes the fact that "life (of the unborn child) is sacred", but one must bear in mind that in this case, the mother was already dead. Should the matter be alive and her life be threatened by difficult labour, embroyotomy is the rule, if the child is still unborn:

"Should a woman have a difficult delivery, her child is cut up in her womb and taken out, limb by limb, for her life comes first".

But should the child be almost completely delivered, he should not be touched, for "one soul shall not be sacrificed for another".

This of course states clearly the position of the Judaic tradition in the complex problem of difficult labour. One might assume, though,

that the child is supposed to be endowed with a soul when almost completely delivered, but, as long as he is inside the uterus, he is considered as a part of the mother, a concept held in many ancient cultures.

Concerning euthanasia, no specific reference can be demonstrated. At most, there is a hint at relaxing strict precautions whenever the prognosis is hopeless:

"When a doctor sees that the patient is in mortal danger, and will die anyhow, he should say to him and his family: "Let him eat anything he wishes", however, the man who can be cured should be taken good care of". - (Shemot Rabba, 30 Varykra Rabba, 33).

Alleviation of the suffering and anxiety of a man who is either sentenced to death or expects to die, is also charitably encouraged:

"He who goes out to be killed is given frankincense to drink to confuse his senses". - (Sanhedrin, 43).

The duties of the physician towards the community pertain mostly to the domain of hygiene. Strict regulations of washing have acquired an almost ritualistic character and can be seen as the parallels of the Christian baptism. Prophylaxis is stressed and the fear of infectious diseases is translated in a compulsory notification of diphtheria and other diseases as leprosy, etc.

Although no specific statement can be found concerning the avoidance of sexual involvement with any member of the patient's family or household

male or female, as it is stressed in the Hippocratic Oath - one can consider it implicit in the "decent and modest" attitude the physician is urged to adopt towards a woman:

"When a woman comes to him to be bled, he would put (that) garment on her and she would wrap herself up, so that none should look at her". - (Zohar, part 3, 299).

Finally, the fees of the physician are referred to, in a very subtle way. Unlike the Babylonians, for whom a fee-scale was clearly defined, and the Egyptians who were state-employees receiving a fixed salary, Jewish physicians seem to have enjoyed more latitude in their fee calculation. Three basic principles are, nevertheless, to be borne in mind, which are assumed in the belief that:

"The doctor who heals free of charge is worth nothing". -
(Baba Kama, 85)

But that one should be charitable with the poor, it is said that ... (Abba Umana) "had a hidden place where his customers would put their coins. He who had one would place it there, in payment for the blood-letting and he who had not was not shamed".

A fellow physician would also be treated free of charge: "and when a scholar happened to come to be bled, he would take no fee from him".

These three indications seem to have provided the ideal guidelines for a decent, humane and realistic attitude in material matters.

ISAAC ISRAELI'S FIFTY ADMONITIONS TO THE PHYSICIANS

(Sefer Muscar Harafi'm)

Ishaq bin Sulyman al Israeli (Isaac Israeli) 840 - 950 A.D. covers in his fifty admonitions the whole spectrum of the relations of a physician or almost. For clarification purposes and for later comparative analysis with modern codes of ethics, these admonitions, phrased in fifty paragraphs, can be conveniently grouped into :

- 1) Duties of the physician toward his patient and vice-versa.
- 2) Duties of the physician toward his colleagues (inter professional).
- 3) Duties of the physician toward society and vice-versa.

However, to start with, a significant importance can be implied from the order in which these are set in the text, at least concerning the spirit one can feel underlying the priorities given. In fact, the very first admonition states that since, according to the Talmud "a man is close unto himself", he has to engage in matters which will sustain his existence, a clearly hedonistic preoccupation. This principle is sustained all through the text, with frank and unbiased statements and advices as to how to achieve professional and financial success.

Duties of the Physician Toward His Patient

The physician is warned against hasty diagnosis and decisions. He is advised to perform his actions with a thoughtful mind and with deliberation "lest he err in something he cannot correct". This seems to be a reminder of the Talmudic warning against malpractice. (para. 3).

illness, which would entice people to wonder if "he who cures not himself could cure others". To guard against exertion, worry and stress which would undermine his health, the physician is advised to avoid having a large practice - a numerous "clientele."

Academic concern, on the other hand, is displayed strongly. Medical studies - or teaching - are clearly divided into theoretical and practical and the importance of the former is repeatedly stressed. Not only is it important for the student-physician to acquire theoretical knowledge, but "he is always obliged and compelled to learn it (the art of medicine) at the commencement of his studies (para. 1) - emphasizing its basic and fundamental role. Interesting enough, this "vital need" is bound in the text with the hedonistic concern which imposes to man "to engage in matter which will maintain his existence" - as if, the acquisition of knowledge was not an end "per se", but rather a prerequisite to professional success. A constant study of books is necessary "before physicians are needed in their profession (para. 2). It is in the same perspective that the tested opinions of ancient physicians are to be given due consideration, since they help building one's experience.

Duties of the Physician(s) Toward the Society and Vice-Versa

In the line of the Judaic tradition, hygiene and prevention are strongly advised, with the motto of "prophylaxis is better than cure" - (para. 15).

The society, for its part, is urged to learn to recognize a good physician, and not to judge him by his appearance. The burden of the

control of the quacks and charlatans seems to be laid on the people who would have to understand "the inner value" of the practitioner, since "the ignorant sees with the eyes and the enlightened sees with the heart"(paragraphs 7 and 48). The Talmudic mistrust of the foreign physicians surfaces also in Isaac Israeli's advices, but whereas in the Talmud it is the doubt that this foreigner could know the patient's background which prompts this reaction, in Israeli's mind, it is the assumption that he who speaks an un-understandable language could easily be concealing his ignorance and at the same time, succeeding in impressing his audience. Much the same held true with the "latin" display of European medieval doctors.(para. 8).

THE DAILY PRAYER OF A PHYSICIAN

(Attributed to Moses Maimonides) -- (1134 - 1204)

Translated in English by H. Friedenwald and published in the Bulletin of Johns Hopkins Hospital, 1977, 28: 256 - 261, this text contrasts sharply with Isaac Israeli's both in its form and its contents:

A distinguished Talmudist, Maimonides was no more a rabbi than was Israeli. However, his "prayer of a physician is imbued with profound religiosity and stands prominently as a genuine philanthropic "credo". It stresses and repeats its God-centered philosophy of the profession, and of life, much as later Christian prayers display for everyday use. One can even parallel his acknowledgement of "God's infinite wisdom in his creation of the human body", with the Puritan concept of "knowing God in his creation". This wisdom of God is also seen in his permitting

diseases which fulfil the role of messengers or signals of danger, thus helping us to avert it: A major departure from the traditional concept of disease in the Judaic tradition which ascribes to it the role of heavenly punishment.

The status of the physician is more than hinted at: it is stressed that he is "chosen by God to watch over the life and death of his creatures", and also that "God endows man (the physician) with the wisdom of medicine". This concomitant status and responsibility confer the highest respect for the profession.

A remarkable blend of philanthropy and asceticism, this "prayer" nevertheless implicitly acknowledges the difficulty of its philosophy, by seeking constantly the help of God to stand to its ideals. Several invocations are, in fact, a disguised reminder of the duties of the physician towards the patient or the society in general. It gives a priority to the love of humanity and of one's craft, and to flee hedonism (love of profit and ambition). Even good health and strength are favoured but with the aim of being always capable of and ready to attend the patient.

Another difference from Isaac Israeli's principles is Maimonides' commitment to treat every patient, rich and poor. He does not state clearly that he will treat the poor, free of charge, but charity can be readily sensed in the text.

In his attendance to the patient, the physician is seen ideally as

frank, honest and modest. He will not pretend to understand what he does not grasp and he will not arrogate to himself the power of seeing what cannot be seen. He has a keen sense of responsibility in asking God to help him "not to be distracted at the bedside of the patient". This could also imply a hint at avoiding being tempted or sexually involved with any member of the patient's family as occurs in the Hippocratic Oath.

Contrary to the praise and presents expected by Israeli, his reward is the confidence and trust of his patients. He expects - not complete obedience of his patients and their family -but, to be spared "the nuisance of officious relatives and know-all nurses who spoil the conduct of treatment".

Interprofessional etiquette suggests patience with older colleagues and the acceptance of constructive criticism by wiser and more experienced physicians - although resisting the censure of fools. Finally, the need for a sound academic teaching is expressed in the request of "always seeking more knowledge in the art of medicine".

THE HIPPOCRATIC OATH

The So-Called Pagan Oath of Hippocrates - 5th - 4th century (B.C.)
(translated by W.H.S. Jones from an attempted reproduction of the "textus receptus" of medieval times)

I swear by Apollo Physician, by Asclepius, by Hygea, by Panacea, and by all the gods and goddesses, making them witnesses, that I will

carry out, according to my ability and judgement this oath and this indenture.

To regard my teacher in this art as equal to my parents; to make him partner in my livelihood, and when he is in need of money to share mine with him; to consider his offspring equal to my brothers; to teach them this art, if they require to learn it, without fee or indenture; and to impart precept, oral instruction, and all the other learning, to my sons, to the sons of my teacher, and to pupils who have signed the indenture and sworn obedience to the physician's Law, but to none other:

I will use treatment to help the sick according to my ability and judgement, but I will never use it to injure or wrong them.

I will not give poison to anyone though asked to do so, nor will I suggest such a plan. Similarly I will not give a pessary to a woman to cause abortion. But in purity and holiness, I will guard my life and my art.

I will not use the knife either on sufferers from stone, but I will give place to such as are craftsmen therein.

Into whatsoever house I enter, I will do so to help the sick, keeping myself free from all intentional wrong-doing and harm, especially from fornication with woman or man, bond or free.

Whatsoever is the course of practice I see or hear (or even outside my practice in social intercourse) that ought never to be published abroad, I will not divulge, but consider such things to be holy secrets.

Now, if I keep this oath and break it not, may I enjoy honour, in my life and art, among all men from all time; but if I transgress and forswear myself, may the opposite befall me.

THE OATH ACCORDING TO HIPPOCRATES INsofar AS A CHRISTIAN MAY SWEAR IT

(Translation by W.H. Jones, this is the "Cruciform Oath" given in Urbrius 64, fol. 116, a tenth or eleventh century manuscript in the Vatican)

Blessed be God the Father of our Lord Jesus Christ, who is blessed for ever and ever; I lie not.

I will bring no stain upon the learning of the medical art.

Neither will I give poison to anybody though asked to do so, nor will I suggest such a plan. Similarly I will not give treatment to women to cause abortion, treatment neither from above nor from below. But I will teach this art, to those who require to learn it, without grudging and without an indenture. I will use treatment to help the sick according to my ability and judgement. And in purity and in holiness I will guard my art. Into whatsoever houses I enter, I will do so to help the sick, keeping myself free from all wrong-doing, intentional or unintentional, tending to death or to injury, and from fornication with bond or free, man or woman. Whatsoever in the course of practice I see or hear (or outside my practice in social intercourse) that ought not to be published abroad, I will not divulge, but consider such things to be holy secrets. Now, if I keep this oath and break it not, may God be my helper in my life and art, and may I be honoured among

all men for all time. If I keep faith, well, but if I forswear myself may the opposite befall me.

The Christian Oath has been very widely used over the centuries, and it is not surprising that several versions exist of it. In the 16th century Elizabethan England alone, there were four versions of the oath.

It will probably be more convenient to analyze and compare the Pagan and the 1st (Cruciform) Christian versions, than to bring in the four Elizabethan variations of the latter version. The Pagan and Christian versions bear differences, of course, but it is interesting to be aware that they bear also similarities - one more aspect of the dichotomy of human nature.

It was stated that the Pagan version of the Hippocratic Oath represents the ancient ideal of the Greek physician. That Justice is enjoined upon him, in contrast to charity, which motivates the Christian doctor. But if nothing is mentioned about the treatment of the poor, it would be fair to remember that it is advised in the Precepts (chapter 6) "to accommodate" one's fees to the patient's circumstances, and to treat strangers and paupers, even if they are unable to pay him:

"I urge you not to be too unkind, but to consider carefully your patient's superabundance or means. Sometimes, give your services for nothing, calling to mind a previous benefaction or present satisfaction. And, if there be an opportunity of serving one who is a stranger in financial straits, give full assistance to all such. For where there is

love of man, there is also love of the art".

So far for the spirit or the philosophy behind both thoughts. As to the form, both begin by an invocation of religious nature - Apollo, Aesclepius, Hygea and Panacea in the Pagan Oath, and God the Father and Jesus Christ in the Christian one. Both condemn abortion and euthanasia, emphasize decency and confidentiality as necessary qualifications for a medical practitioner, and promise fame to the healer who fulfils these obligations, and, "the opposite to the one who fails it".

The two versions, however, depart in the following: - the Pagan Oath is divided into two parts:

- the first part concerns the duties of the pupil i.e. the student of medicine towards his teacher and his teacher's family and his obligation to transmit medical knowledge.
- the second part concerns the rules to be observed in the treatment of diseases, i.e. the duties of the physician towards his individual patient, his patient's family and society in general.

The Christian Oath, for its part, does not refer at all to any "privileged relations" to the teacher and his family. No mention is made of any pledge made by those who swear the oath to share their learning only with their own sons, the sons of their teachers or those who had taken the oath". To Christians, who believed in brotherhood and universal benevolence, this statement seemed to stress elitism and trade-unionism. It can also be assumed that in the classical and Hellenistic periods, transmission of knowledge in such a rigid way as to include only the sons

and the teacher's sons was perceived as too restrictive and was thus extended to include "those who swear the oath" and who come thus to be considered as an "extended family". For a further extension of the profession, in Christian times, teaching is allowed to be delivered to "those who require to learn it". In other words, the needs of an expanding community might have dictated this more liberal approach.

In both the Pagan and the Christian oaths, there is a clear interdiction of euthanasia and suicide. One has to remember, however, that ancient religion did not proscribe suicide, that it did not know of any eternal punishment for those who committed it. In fact, Thebes was the only city where suicide was forbidden, and in Athens and Rome, the special regulations concerning the burial of a suicide were directed only against those who committed suicide when still able to bear arms. There was no dogma of an eternal soul for which men must render account to their creator. Law and religion left the physician free to do whatever seemed best to him. It is not "justice" therefore, that dictated this interdiction of euthanasia, but high morality and idealism. Much the same could be said about abortion, as the ancient Greek society was indifferent to foeticide or at the most considered it only in the perspective of "robbing the father of something that belonged to him". By adhering to the principles of the Hippocratic Oath, the ancient Greek physician was thus adhering to a dogma which was much stricter than that embraced by most of his fellow-citizens - a merit which is not shadowed even by the commitment of the Christian physician not to cause abortion, neither from above nor from below, i.e.

by adding to the interdiction of the pessary that of any aborti-
ficient. Finally, in the Pagan version of the oath, the physician
swears not to use the knife, even in the most painful condition, that
of a calculus. This, he leaves to the surgeon, who used to be considered
of a lower social and professional status than the physician. Such a
discriminative distinction is completely omitted in the Christian version,
although for centuries and up to the Renaissance period, it has officially
persisted.

THE 16TH CENTURY ELIZABETHEAN ENGLAND. VERSIONS OF THE HIPPOCRATIC OATH

Four versions have been identified:

- 1) Due to John Securis, and appearing in his book: "A Detection and Querimonie of the Daily Enormities and Abuses Committed in Physik", published in London in 1566.
- 2) Due to Thomas Newton and found in his book "The Old Man Dietarie", appearing in 1586.
- 3) In John Read's translation of Arcaeus' "A Most Excellent Method of Curing Wounds" published in 1588.
- 4) Appearing in Peter Lowe's "The Whole Course of Chirurgerie".

These four versions exhibit individual variations from the oath, either by giving a different interpretation of one or more of the passages of the oath or by adding injunctions, which, however, do not depart from the spirit of the original oath.

The major differences can be seen in the following:

- 1) Concerning the duties towards the teacher, instead of swearing "to share" his substance with him the student physician in Newton's version commits himself "to be conversant in life with him" and "to minister unto him all such things as I understand he hath need of".
- 2) The covenant to teach the art of medicine to his teacher's sons without fee is extended by Newton to the poor, so he states:

"That I shall not be squirmish to bestow my skill in this arte upon the poor and needie, freely, without either fee or other covenant certainly agreed upon".

As has been mentioned previously, there is a statement in the Hippocratic precepts which urges the physician to consider "the patient's superabundance or means", adding: "Some times, give your services for nothing". But the oath itself does not contain such a reference.

- 3) Both Newton and Lowe interpolate a recommendation of not prolonging the patient's illness, a charge that is sometimes made against the doctor - apparently in all times and places. This reads as follows:

"I shall not deferre or linger my cure longer than I neede, keeping my patient thereby the longer while in grief and pain".
- 4) The interdiction of giving or supplying poison in the original Pagan oath is made even more precise. In Peter Lowe's book, the physician swears:

"That I shall not minister no poyson, neither cancell, nor teach poyson, nor the composing thereof to any".
- 5) Lowe adds an injunction, imposing to the physician to be patient with the sick and sustain "the injuries, reproaches and loathsomeness", they sometimes display when they suffer acutely and lose their self-control.

6) A misinterpretation of the interdiction of sexual involvement with members of the patient's family and household and its binding with the secrecy clause, occurs in Lowé's version, which states:

"I protest, be it man or woman, or servant, who is my patient, to cure them of all things that I may see or hear, either in mind or manners".

7) In Read's version, the imprecation on violating the oath is extended to his patients "I wish to God that in all my cures and other affairs I may have evil success, and that everyone may discommend me to the world's end.

EARLY MEDIEVAL ETHICAL MANUSCRIPTS

"THE BAMBERG MANUSCRIPT"

"The historical astigmatism of tradition" is responsible, according to L.C. Mackinney (1977), of the extremes of generalizations concerning Greek and medieval physicians. Derogatory generalizations regarding the medieval physician who is perceived as a quack, faith-healer, medicine-man and barber-surgeon, while over-praising the high medical standards of the Greek physician, have to be corrected, in relations to the early medieval period (400 to 1100 A.D.), as much as to the late medieval period (1100 A.D. to the Renaissance) with its Salernitan influence of revised Hippocratic idealism. Unlike the latter, early medieval regulated medical conduct borrowed more from the Hippocratic tradition than from biblical or clerical sources. However, as has always

been the case. The influence of contemporary conditions and of practical experience led to variations from the Hippocratic dicta and also to some miscellaneous conclusions. This is evidenced by the following documents:

- 1) A 4th century (A.D.) letter from St. Jerome, addressed to Nepotian, a young clergyman from North-Italy.
- 2) The 5th century Visigothic code in Spain)
) (both being governmental regulations)
- 3) The 6th century Ostrogothic code in Italy)
- 4) Several epistolary manuscripts, written in North-European monasteries in the 8th, 9th and 10th century, the so-called "age of monastic medicine", of which, the most important is probably the "Bamberg manuscript". Compiled at the end of the 8th century in a German monastery, recopied in its present manuscript form a century later, it was transferred to the Bamberg Cathedral around 1000 A.D., where it is kept to the present day.

Other manuscripts, found later, in other centres, include the Paris, charters, Montpellier, Rome, Brussels and Karlsruhe. Similarities overshadow differences both in ethics and in etiquette. On the whole, it must be realized that, except for a slight hint at legal or governmental control in the Visigothic Spanish and Ostrogothic Italian treatises, medical practice was no more subjected to legal penalties or guild organization in early medieval time than it was in ancient Greece. Both were also equally subjected to idealistic and practical influences.

The moral injunctions against giving poisons or abortives violating the patient's confidences and sexual involvement with his family or household are the same as in the Hippocratic Oath.

Even the commitment to keep himself "pure and holy" is expressed as "immaculate and sacred" in the treatise k (a).

The only difference one can detect lies in medical education, as, in medieval writings, emphasis is put on a broad academic background of liberal arts education (treatises I, K, L and Q), so far for the ethics. As for the etiquette, similarities abound. Thus:

- The admonition to avoid the excess of wine are similar in Hippocratic "Decorum" Chap. XV and the Treatises F, L and Q.
- That concerning the avoidance of excessive ointments: Hippocrates "Precepts" X and "Physicians" I - Treatises k (a).
- That concerning ostentation in dress and manner: Hippocrates "Precepts" X and "Decorum" II, III, VII - Treatises G, L, K (a).
- Patience with difficult patients - Hippocrates "Decorum", XII - Treatises k (a).
- Withholding of information from the patient - Hippocrates "Decorum" XVI - Treatises C and P.
- Restraint in payment of fees - Hippocrates "Decorum" II, "Precepts" IV - Treatises N and P.

and finally, the contrast between the high ideals of the profession and its low moral repute are identical in: Hippocrates "Art" I, IV, V, "Law" I, "Decorum" II, VII - Treatises B, J and k (a).

FREDERICK II MEDIEVAL LAW FOR THE REGULATION OF THE PRACTICE OF MEDICINE

In 1240 or 1241, Frederick II, emperor of the two Siciles issued a law which was binding only to his subjects and which reflects the state of medical practice in South Italy in the two universities of the kingdom - those of Salerno and Naples. The Salernitan teachings deeply influenced the later part of the medieval period and far beyond the frontiers of the two Siciles.

The text of the Law has been exposed by Walsh (1911) and comprises three important groups of regulations:

1. The first group comprises the regulations related to the educational requirements for students of medicine and surgery, the examination and licensing to practice medicine and surgery and finally the fees of the medical practitioner.

A) Educational Requirements for Students of Medicine and for Medical Practice

Three years of pre-medical studies covering a broad spectrum of subjects included under the term "logic" and comprising grammar, rhetoric, arithmetic, geometry, astronomy, theology and music. A good cultural background which provided the student with an appreciation of the many-sided facets of the mind of man. These were followed by five years of medical studies, both theoretical (the recognized books of Galen and Hippocrates) and practical, teaching being restricted to the University of Salerno and Naples only. Surgical students are required to have followed a good course of anatomy and to have spent at least a year in the study,

of surgery, during which they have been acquainted with the surgical instruments and techniques. At the end of the studies, and after obtaining a written certificate from the teacher (in medicine and surgery) as to his satisfactory completion of studies, he has to pass a legal examination (by examiners officially appointed). Then, a full year of practice under the supervision of an experienced physician is required before he can obtain a certificate delivered by a civil official appointed by the Imperial court, declaring his trustworthiness and his sufficient knowledge. Finally, upon presentation of this document to the Emperor or his representative, the physician is granted by him a license to practice.

B) On licensing, a physician takes "the oath", the injunctions of which comprise duties and interdictions. The duties include:

- reporting dishonest apothecaries
- treating the poor, free of charge
- respecting specified fees for home-visits, in the city and outside it.

The interdictions concern:

- entering in business relations with an apothecary
- taking an apothecary under his protection
- incurring any money obligation toward an apothecary
- keeping an apothecary's shop himself

Violation of the law or practicing with no license leads to confiscation of goods and one year in prison.

2. The second group concerns regulations for apothecaries, and states that:

- they must conduct their business with a certificate from a physician and upon their own credit and responsibility.
- they cannot sell their products without having taken "the oath" that all their drugs have been prepared in the prescribed form and without fraud.
- they must sell their drugs according to specified sale prices.
- the stations for the preparation of medicines must be located only in prescribed places.

3. Regulations for growers of plants meant for medical purposes

They must take "an oath", swearing to:

- prepare medicines conscientiously
- as far as is humanly possible, prepare them in the presence of inspectors (appointed by the Imperial court).

Violation of the law results in confiscation of the movable goods of the plant grower, whereas an inspector who allows a fraud incurs the death penalty.

MODERN CODES

THOMAS PERCIVAL'S CODE OF ETHICS	1803
THE AMERICAN MEDICAL ASSOCIATION CODE OF MEDICAL ETHICS	1847
THE AMERICAN MEDICAL ASSOCIATION PRINCIPLES OF MEDICAL ETHICS	1903
THE AMERICAN MEDICAL ASSOCIATION PRINCIPLES OF MEDICAL ETHICS	1912
- SUBSEQUENT ADDITIONS AND DECLARATIONS ON INTERNATIONAL LEVEL	

THOMAS PERCIVAL'S CODE OF ETHICS

Initially circulated under the title: "Medical Jurisprudence", it was later changed to "Medical Ethics", with Percival arguing though that his understanding of Jurisprudence stemmed from Justinian's definition of the term which covers moral injunctions together with positive ordinances. Asked to draft a code of rules, regulating and governing medical practice at the Manchester Infirmary, Percival was expected to write a set of rules for a hospital, not a general work on Medical Ethics. Actually, his "Medical Ethics" is a little more than a pragmatic code and a little less than a systematic treatise" (Burns: 1975). They are individual precepts, illustrated with specific examples and framed within the context of religious sentiment, moral theory and legal prescription. As Burns (1975) expressed it, "there was a clover leaf of four parts to Percival's understanding of professional ethics":

1. One involving the physician's image of himself as a "gentleman-physician".
2. Another involving the relationships between medical practitioners, "the brethren".
3. A third concerning his relations with his patients.
4. A fourth dimension, involving the relationships of physicians with the community.

The code is thus, divided into four parts, though it can be noticed that of the seventy-two precepts which contribute the first three chapters, fifty-seven still deal with the care of the patient.

The First part, deals with the physician's image of himself. A "Gentleman"

physician must:

- Unite "tenderness with steadiness" and "condescension with authority" in order to elicit gratitude, respect and trust from his patients.
- Physicians and surgeons should be "governed by sound reason, just analogy and well authenticated facts" to be able to make a sound decision about using a new drug or a new surgical procedure.
- Conduct impartial retrospection of the treatment and response in each of his patients, to avoid self-deception and error.
- Observe a "decorous" silence in the operating-room, except if the patient needs reassurance or instructions; change his apron between operations to spare the patient the sight of blood.
- Be temperate, so as to be able to perform adequately, especially in emergency situations.
- Be punctual, to prevent unnecessary visits to the patient and his repetitive questioning.
- Be educated, although for Percival, "a regular academic education" was not absolutely necessary to attain the skill in the practice of medicine and surgery. Those who had the skill, but lacked the academic distinction should not be excluded from the fellowship of other practitioners.

The Second part of Percival's Code involves Inteprofessional Relationships

- A physician should not damage the reputation of a colleague. Complaints about neglect, ignorance or impropre conduct must be made to the

committee of "the gentlemen of the faculty". However, should the patient's life be threatened, interference becomes a duty on the part of the physician.

- Consultations are encouraged between physicians, surgeons and apothecaries. The latter are known to be more familiar with the patient and his past and family history than anybody else, especially in rural areas.
- Elaborate rules of consultation are set. They include:
 - a distinction between the provinces of physician and surgeon should be sustained.
 - the need and obligation, for consulting physicians and surgeons, to agree about procedures, in all important operations.

The Third Part Concerns the Relationship of the Physician to the Patient

- Percival stresses the practitioner's regard for his patient's feelings and emotions as well as for the prejudices of the sick.
- Privacy of the interrogation is considered absolutely necessary.
- The physician should not use quack medicines and should avoid dispensing "secret nostrums".
- Gloomy prognostications are strongly discouraged, but, the practitioner is advised - in case a fatal issue is foreseen - to discuss frankly the problem of a last will and testament with the relatives of a dying patient.

The Fourth Part of the Code Concerns the Duties of the Physician Toward
the Society at-large

Percival was acutely aware of the social health problems of the community and deeply involved in the practical steps necessary to solve them. One can say that he had an "avant-garde" view of pollution control, infectious disease control and epidemiological studies and health statistics. In this connection, he urged communities:

- To establish more asylums and hospitals - specifically for insane and for women suffering from syphilis.
- Special infectious diseases wards, and precise hygiene measures concerning their staff and working.
- Regulations concerning the care of hospitalized patients:
- The establishment and keeping of registers for patients which would enable professionals and citizens to circulate disease patterns with age, sex, occupation, climate and seasons. This is actually the concern of modern "epidemiology" and it has gained a considerable importance.

Percival was not only well-versed in religion and moral philosophy. He was remarkably acquainted with a number of legal works written by important scholars and he was convinced that a society, which exempted physicians from certain civil duties such as military service or jury duty, could in return, make certain demands on these practitioners.

Those duties, which a physician cannot eschew, include:

- Making a decision about the mental abilities of a sick person who wants to prepare a will or a testament.

- Testifying in cases of sudden death, which entails -
- Knowing the difference between justifiable, excusable and felonious homicide. This matter is treated at length by Percival with specific examples to illustrate each case.
- Careful examination and testifying in cases of rape since he has the duty to protect "the most sacred of all personal property", at the same time, avoiding to indict an innocent, as he exemplifies in the case mentioned by Sir Matthew Hale. In the latter, "typhus fever" was the actual "post-mortem" discovered cause in a case wrongly attributed to rape.
- Calm and unbiased precision in testifying in cases of poisoning, with circumstantial proofs adduced in the most-logic order, from the slightest presumption to complete moral certainty.
- Careful evaluation of the charges of abortion and foeticide, and an assessment of the actual effects of the methods used.

NORTH AMERICAN MEDICAL ETHICS

The first code was adopted by the "Boston Medical Association" in March 1808. It included all the precepts found in the second chapter of Percival's "Code of Ethics" i.e. the regulations concerning consultations, arbitration of conflicts, interference with another's practice, fees and security among physicians; but ignored Percival's precepts about hospital practice, apothecaries and laws. Perhaps because of these exclusions the "Boston Medical Police" (code) became the model for codes of medical ethics adopted by at least thirteen societies in eleven states.

The "Code of the New York State Medical Society" imitated the Boston code, but, according to Burns (1975), included the forensic obligations so important to Percival, but rejected his rigid distinction between physicians, surgeons and apothecaries. They championed Edinburgh professor of medicine (John Gregory (1724-73) ideal about "the social arrangement of medical practitioners. The Code of the Baltimore Society was issued in 1932, and used the writings of Percival, Gregory and Benjamin Rush - a Philadelphia professor, educated in Edinburgh and a pupil of Gregory by whom he was profoundly influenced. Rush had offered, in 1808 his ideals about the obligations of patients. According to him, patients should select only those physicians who have received a regular (academic) medical education and who have regular habits of life. They should relate their history fully, obey the doctor's prescriptions promptly, express their appropriate gratitude and pay their fees without delay. The first code of medical Ethics for the American Medical Association was finally drafted and adopted on May 6, 1847. It preserved the words of Percival, although a few sections were in those of Rush. But, unlike Percival's arrangement of medical practitioners in hierarchical order, the first A.M.A. code of ethics grouped them in local, state and national societies.

THE AMERICAN MEDICAL ASSOCIATION CODE (1847)

The first part of the code deals with the duties of the physicians to their patients and of the obligations of patients to their physicians.

Duties of physicians to their patients:

- A physician should ally tenderness with firmness and condescension with authority.

- Steadiness, attention and humanity in treatment, and delicacy and secrecy to be always observed.
- Visits should be reasonably frequent, but unnecessary visits should be avoided as they might diminish the physician's authority.
- Avoid gloomy prognostications, but in certain circumstances, timely notice of danger to the family or the friends of the patient is advised.
- Even when a case is deemed incurable, attendance of the physician is necessary to comfort the patient and his relatives.
- Consultations should be promoted in difficult or protracted cases.
- Counselling the patient suffering the consequences of vicious conduct is encouraged.

Duties of the patients to their physicians

- Should entertain a just sense of the duties which they owe to their medical attendants.
- Select as his medical attendant a physician who has received a regular medical education.
- Prefer a physician with regular habits and not devoted to pleasure.
- Communicate to their physician a complete history of complaints but not weary him with tedious detail, obey his physician's prescriptions.
- Avoid even the friendly visit of a physician who is not attending him.
- Courtesy in receiving the physician - and even dismissing him.

The Second part concerns the duties of physicians to each other and to the profession at large

A practitioner should:

- Behave so as to honour the profession.
- Temperance in all circumstances, especially in emergency.
- Avoid any form of publicity and "secret nostrums".
- Attend with no charge all physicians, their wives and children residing near them, if assistance is requested.
- Accept to replace a colleague who has to withdraw temporarily.
- Regulations concerning consultations: no rivalry or jealousy should be indulged in, an orderly system in delivering the opinion and specific solutions for various circumstances where several consultants are called, punctuality, secrecy and confidentiality and finally, problems arising from conflict of opinion.
- Avoidance of interference in another physician's cases, and even of visits to another physician's patient, and the obligation to surrender the patient attended in case of absence of the regular physician.
- Conflicts of opinion or of interests should be referred to a "court - medical" for arbitration, but never publicized.

The Third part concerns the duties of the profession to the public and the obligations of the public to the profession

- Duties of the profession to the public

- Attend to public hygiene, quarantine regulations, hospitals, schools, asylums, drainage, ventilation, etc.

- Testify in inquests related to sanity, legitimacy, poison, murder.
- Free for professional services to the poor should be provided.

Duties of the public to physicians

- Consideration and respect to physicians.
- A proper discrimination between physicians and quacks.

PRINCIPLES OF MEDICAL ETHICS OF THE AMERICAN MEDICAL ASSOCIATION (1903)

The A.M.A., avoided reference to "code" or penalties, leaving discretionary powers to the state societies to form such codes for the professional conduct as they may consider proper, provided there shall be no infringement of its established ethical principles.

These "Principles of Medical Ethics" are divided into 3 parts:

The First part deals with the duties of physicians to their patients

These are practically identical to those included in the 1847 Code. They concern the physician's attitude and responsibility, his humanity, delicacy and discretion, the frequency of his visits, the honesty and wisdom of his prognosis, the encouragement of his patients, and the continued attendance of incurable cases.

The Second part deals with the duties of physicians to each other and to the profession at large

They include the obligation to maintain the honor of the profession, to observe professional rules, and join medical organizations. Also, to maintain purity and morality as well as temperance in all things; to avoid advertising and secret nostrums. Professional services toward each other are identical to those of the A.M.A. 1847 Code. They stress the

dependency of physicians on each other, gratuitous services to them as well as to their immediate family dependents and compensation for incurred travel expenses. Consultation regulations do not depart from the line adopted in the previous code, with the same concern for the problems of calls to patients of other physicians and the summoning of several physicians simultaneously, as well as to those of arbitration of differences. More emphasis is placed on fees, fee bills and fees for certificates - exemption of the poor being however considered.

The Third part concerns the duties of the profession to the public

To the obligations imposed by the 1847 Code, are added those of enlightening the public on the wrongs of charlatans, and recognizing and promoting the profession of pharmacy.

PRINCIPLES OF MEDICAL ETHICS OF THE AMERICAN MEDICAL ASSOCIATION (1912)

As the preceding codes, it is divided into three parts, with practically the same inclusions. One can notice, however, that in four, at least, it appears more simplified and reduced. Other differences include:

In the first part, the "deportment" of the physician is described in Hippocratic terms, stating that a physician should be "an upright man, instructed in the art of healing", pure, diligent, conscientious in his studies, modest, sober, patient, prompt to do his whole duty without anxiety, pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life.

In the second part, three new inclusions are noticed:

- Referral of a patient to a specialist entails the sending to the latter by the attending physician of a history of the case, together with his opinion and an outline of the treatment.
- Contract practice under conditions detrimental to the physician and to the dignity of the profession should be avoided.
- Condemnation of secret division of fees - a precursor of such a regulation was seen in Frederick II law in medieval times.

WORLD MEDICAL ASSOCIATION - DECLARATION OF GENEVA (Sept. 1948)

The General Assembly of the World Medical Association, adopted at Geneva in September 1948, the following Declaration:

- "At the time of being admitted as Member of the Medical Profession -
- I solemnly pledge myself to consecrate my life to the service of humanity;
 - I will give to my teachers the respect and gratitude which 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 which are confidential in me;
 - I will maintain by all the means in my power, the honour and the noble traditions of the medical profession, my colleagues will be my brothers;
 - I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient;

- I will maintain the utmost respect for human life, from the time of conception, even under threat, I will not use my medical knowledge contrary to the laws of humanity;
- I make these promises solemnly, freely and upon my honour".

(W.H.A.B., 1: 109-111), - 1949

THE MEDICAL CODE itself is a development of the preceding resumé. But before proceeding further, one can already identify the following modifications from the Hippocratic Oath, even in its Christian version:

- The religious connotation is dropped - only "the service of humanity" is referred to.
- The commitments to the teacher is reduced to respect and gratitude - no mention is made of his sons or of any medical education to be transmitted.
- Nothing is mentioned about euthanasia, but the abortion interdiction is clearly stated to start "from the time of conception".

The major new inclusions are:

- Treating colleagues as brothers: although treated at length in Percival's Code of Ethics and in the A.M.A. codes and principles of ethics, it makes, now, part of the oath.
- The interdiction of discrimination, between religious, racial, national, political or social appears for the first part in a text or an oath. The only "precursor" to this attitude is probably in Maimonides' "Daily Prayer of a Physician", where pledge is made "to help and support rich and poor, good and bad, enemy as well as

friend. In the sufferer, let me see only the human being".

But never before, a more precise and clear condemnation of discrimination as unethical in medical practice, was made.

In the code itself, more details allow for the following observations:

- The interdiction "to do anything that would weaken the physical or mental resistance of the human being, except from strictly professional reasons in the interest of his patient" is the first hint at the control of experimentation on human subjects expressed in the Code of Nuremberg (1947). It can also be applied to drug therapy in mental institutions or departments.
- The total interdiction of practising abortion is somewhat relaxed. Thus, "therapeutic abortion may only be performed if the conscience of the doctor and the national laws permit.
- The pledge to obey the calls of patients is re-expressed in such a way as to make it imperative only in cases of emergency and not necessarily if he is assured that treatment can and will be given by others.

THE A.M.A PRINCIPLES OF MEDICAL ETHICS (1957)

This new proposal is stated to be a set of standards - not laws - by which a physician may determine the propriety of his conduct, in his relationship with patients, colleagues, members of allied professions and the public. It is composed of ten sections, which are, however, concise and simple and are a much reduced form of the preceding one (1912). The only difference observed is in Section 2, which imposes to physicians

"to strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments" - academic standards gaining more and more importance in North-American medical centres.

THE NUREMBERG CODE (1947)

Adopted in 1947, after the Nuremberg Military Tribunal examined and condemned criminal medical experiments carried on a large scale in Nazi Germany, it aims at establishing a rigorous control on medical experimentation on human subjects. It specifies that certain basic principles must be observed in order to satisfy moral, ethical and legal concepts. Thus.

1. The voluntary consent of the human subject is absolutely essential:

The person involved - should have the legal capacity to give consent

- should be able to exercise free power of choice, without the intervention of any elements of force, fraud, deceit, duress, over-reaching, or any ulterior form of constraint or coercion.

- should have sufficient knowledge and comprehension of the elements of the subject matter involved, as to enable him to make an understanding and enlightened decision, i.e. there should be made known to the subject, before the acceptance of an affirmative decision, the nature, duration and purpose of the experiment; the methods and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected;

and the effects upon his health or person which may possibly come from his participation in the experiment.

- The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity.

2. The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature.
3. The experiment should be so designed and based on the results of animal experimentation or other problem under study that the anticipated results will justify the performance of the experiment.
4. The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.
5. No experiment should be conducted where there is an "apriori" reason to believe that death or disabling injury will occur; except perhaps in those experiments where the experimental physicians also serve as subjects.
6. The degree of risk taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.
7. Proper preparations should be made and adequate facilities provided to protect the experimental subject against, even remote possibilities of, injury, disability or death.

8. The experiment should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment of those who conduct or/and engage in the experiment.
9. During the course of the experiment, the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him to be impossible.
10. During the course of the experiment, the scientist - in charge must be prepared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill and careful judgement required of him that a continuation of the experiment is likely to result in injury, disability or death to the experimental subject.

PART II - THE SOCIOLOGICAL BASIS OF MEDICAL ETHICS

RELIGION AND MEDICAL DEONTOLOGY

PRIESTS-PHYSICIANS IN HISTORY

Since the dawn of history, medicine and religion have been inextricably woven.

In ancient Egypt, Imhotep, the god of medicine, is actually a deified physician. The Greek pantheon goes even farther. Besides Aesculapius, the god of medicine, we have Peon, the physician of gods. The former is the son of Apollo, a god, and Coronis, a nymph (a lower status goddess), as if to symbolize that medicine partakes of both the divine and the material. Greek medicine being divinatory, it was up to the priest of Aesculapius to extract from the dream the "therapeutic inspiration". Elsewhere, the shaman takes over the role of the magician-physician, and in African cultures, the sorcerer is a healer. When religion loses its grip on the human mind, philosophy replaces it. In ancient Greece, Aristotelianism, pythagoricism, stoicism and other schools will flourish and for centuries will deeply influence science and medicine.

In the Judaic tradition, rabbis were physicians and vice-versa. In the early Christian era, and almost to the 13th century, the only profession the church allowed the clergy to practice was medicine. Later, many physicians had access to priesthood. Bacon, Rabelais, Servet and De Sorbière were all physicians and priests. In the 18th century England, Thomas Percival, who devised the first code of ethics of modern times, was a devout unitarian and physician. His

Northern-American followers were also Unitarian physicians. It was the Jesuit Fathers who founded "La Conférence Laennec", and later, edited the "Cahiers Laennec", the official review of the French Medical secretariat. Its counterpart in the United States is the Catholic Hospital Association and its review.

THE MEANING OF CODE ABSENCE

"Code absence is as meaningful as its presence" states Ezioni (1973:3). However, the presence of a code is not necessarily a function of literacy. Some preliterate societies can be said to have an unwritten code, while other societies with a written culture are "codeless". Thus, in the shamanistic tradition, definite rules of candidate selection, preparation and initiation rituals can be viewed as a series of regulatory professional mechanisms and, in a sense, as elementary codes. On the other hand, ancient Egypt, with a complex hieroglyphic culture, and an "avant-garde" socialized medicine, does not have a real deontological code. The explanation is twofold. First, the existent bureaucracy of a state-controlled medical practice, made further professional control by deontological rules, superfluous. Second, being blended with religion, medicine followed automatically the strong regulations of a powerful, well-structured and all-pervasive religion. The same could apply to the Judaic and early Christian traditions. Since physicians were learned rabbis, well versed in Talmudic texts where references to the rules of medical practice abound, it was practically unthinkable to add anything to what God had already taught. In the Christian tradition, and almost to the Renaissance period, the grip of the church on everyday life was strong. So it was thought that all that was needed was a slightly modified version of the pagan oath, "the Hippocratic oath as a Christian

physician may swear it". The only profession the church allowed the clergy to practice being medicine, needless to say, the practice of the profession was deeply permeated with strict religious concepts - even surgery was forbidden, since priests were not allowed to shed blood. In these circumstances, there was no need for a new code. Even the 13th century Frederik II laws were binding to the Two-Sicilies only and did not extend to the remaining Christian world. It is only in the 19th century England that modern codes will emerge, when among other factors, the influence of the church was starting to decline.

In the Islamic culture, the same phenomenon can be witnessed. Since the Koran is studded with hygienic prescriptions and since Islamic concepts subsumed all aspects of everyday life, including interpersonal relations, strict observance of the Koranic law was, in itself, a substitute to any code of deontology. It is only later during the 12th century or 13th century Islamic cultural "apotheose", that relaxation of the religious trend coupled with an increasing number of practicing charlatans led great physician-writers (Rhazes, Avicenna) to suggest stricter regulations concerning teaching of medicine and the medical practice. However, these were never embodied in an official or formal code.

To sum up, the absence of a written, formal and independent code of medical deontology can only stress the importance of religion, in relation to the very concept of the codes. So much so, that one could say, that where the codes of ethics are not apparent, they have to be sought actually in the religion itself - its concept and regulations.

Now, let us consider the relation between religion and religious institutions, on the one hand, and the medical codes of ethics - whether written or unwritten, on the other hand.

IN ANCIENT EGYPT, as we said, medicine was intimately related to religion. The concept of an immortal soul, of an "after life" could only heighten the importance of preservation of the body i.e. of embalming, which involves an interest in anatomy. In another perspective, the blend of the two professions: clergy and medicine, bestowed on the physician, the power and prestige of the revered priestly caste. It also imposed on him the strict rules and traditions of religion; as witnessed by the rigid sticking to the medications advised by ancient masters of the craft, and the death penalty incurred for transgressing such injunction. As religion was organized in a structural state-administration, so was the medical profession, which submitted to a parallel bureaucracy, with its rules and regulations.

THE JUDAIC TRADITION

As previously stated, there is no formal code of ethics in the Judaic tradition and no oath is required from physicians, but references to physicians and medical practice abound in the Talmud. The great medieval Jewish physicians, Isaac Disraeli and Moses Maimonides are rated as excellent Talmudists and continue, in a way, a long tradition where medicine and religion are blended. Since biblical times, rabbis are physicians and vice-versa.

What is striking in the Talmud is the omnipresent concern of God's justice. Disease being viewed as God's punishment, there is almost a reluctance to interfere with his plans. Nevertheless, two models of doctors are proposed: Kratnae, the divine doctor - implacable, merciless executioner of the verdicts pronounced by the Heavenly court (disabilities ... etc.) and Abu Umana, the humane, charitable and courteous physician. Without imposing a view, the latter is, however, subtly favoured, thus framing the qualities and virtues to be

expected from the physician. The status of the profession is given much importance in the Judaic tradition, since the physician is considered to be imparted of God's wisdom, and knows the function of the different plants that God has intended to be used as healing substances. The statement that "the doctor who comes from afar is like a blind man" can be viewed as discriminatory toward foreign practitioners, but, in a sense, it could serve as a way of controlling the entry to the profession and of excluding physicians of unverifiable knowledge.

Concerning euthanasia, not much about it can be dug out from the Talmud. True it is advised to give frankincense to confuse the senses of he who goes out to be killed and to relax the dietary restrictions when a patient is in mortal danger, but this almost absence of direct reference to it could be explained by the fact, that in the Mosaic laws, the forbidding of homicide occupies only the 5th place on the Table of the Laws.

Complex rules are enunciated concerning the management of difficult labor. However, a careful analysis can disclose the subsumed concept of priorities, when a choice has to be made. The mother's life has precedence over that of the unborn child. Another fact is quite precious: no matter how much piety is encouraged and praised, the physician is strongly advised to consider his patient's life before anything else. Thus, even on Sabbath day, he should not hesitate to perform a Caesarian section when such is imperative (death of the mother, while the unborn child is still alive).

Finally, the importance given by the Talmud to the well-being of the community gives the prescriptions of washing and cleanliness its ritualistic character.

Prophylactic hygiene laws and the compulsory notification of leprosy and diphtheria stem from the same concern and the same concept.

THE HELLENISTIC TRADITION

The Hippocratic oath and the Hippocratic treatises have been written most probably in the 4th century B.C. Before this date, no written or unwritten code can be traced in the Greek culture. A close look at the religion of ancient Greece does not reveal any reference to rules of behavior concerning physicians or the medical practice. But, as in the case of ancient Egyptians, the Aesculapides were priests-physicians. Moreover, they practised their art in the temples of Aesculapius. One can assume, therefore, that they were already submitted to the rules of behavior of the temple attendants and so did not need to devise a code of their own. It is said that they used to take the offerings brought by the patients, which may not seem very appropriate for priests, but could represent a fee-for-service practice. The kind of medicine they practised was divinatory, and the patients were asked to write down on the walls, both the symptoms they complained of and the therapy they had been advised after the dream. Both facts seem to palliate for the absence of a formal teaching of medicine.

However, when Hippocrates - considered as the 18th descendent of Aesculapius - started practicing and teaching medicine, a new tradition of medicine, based on scientific concepts, was born and perpetrated. The religious element lost its importance and was gradually replaced by various philosophical schools of thought, which flourished from the 4th century B.C., through the Hellenistic period to the time of Galen, the most important of which were the Aristotelian, the Phytagorean the Stoic, the Platonists and the Hippocratic.

Ancient religion had not delivered any moral or metaphysical message. When the city-states disappeared, the vacuum created led people to turn to philosophy for guidance, and in search of standards on which to orientate themselves. The acceptance of a philosophical ethic by the physician reflects an important event: the change of the medical art into medical science. Medicine went beyond the application of traditional knowledge and engaged into an intense research in the nature of the body and the various factors which may have a bearing on it. Physicians studied philosophy and adhered to various sects to which the unity of medicine and philosophy was axiomatic. Their ethics, therefore, were identical with those of the philosophical school to which they professed allegiance. Philosophical training was thought essential to anyone who wanted to be "a physician in deed, not only in name".

Through these schools, the ethics of the medical craftsman was reshaped in accordance with the various systems of philosophy. For Aristotle, the artisan is subject to the performance of his particular job; his moral goodness is his own affair. When adapted to medicine, the Aristotelian school prescribed to the physician self-control, regularity of habits, justness and fairness, a proper and good behavior, in short, all the virtues of a "gentleman". In the "Precepts" and in "On Decorum", gentleness and kindness are recommended, especially toward he who is a stranger or in financial straits. Readiness to call in another consultant and courtesy toward him stress that priority should always be given to the best interests of the patient's health.

The Pythagoreans insisted that the good could be achieved especially well through the crafts. Later, "good life" was distinguished from "happy life"

the first implying the need of an occupation, while the latter presupposes independent means. Both, however, request that man fulfill the moral law. For the Stoa, money acquisition is compatible with the moral order. They teach, however, that, in all circumstances, one must live up to the rules of "ethics". This implies an identification of morality with the inner attitude of man, rather than with the objective content of his actions.

According to the line of Peripatetic ethics, cited in Aristotle's "Politics", "Workmanship can be noble or ignoble depending on how much or how little virtue it requires as an accessory". The proper criterion of right or wrong is in the proper use of things - rather than in the things themselves.

For the Greek physician - medicine possesses all the qualities that make for wisdom, a wisdom applied to life. If in the Judaic tradition, the physician is endowed with God's wisdom, the Aristotelian school considered the physician with the right kind of philosophy as indeed the "equal of God". While according to the stoic school, the true physician is the peer of the sage.

As I said before, the Hippocratic oath and treatises were written around the 4th century B.C. It is probable that they should not be ascribed to Hippocrates alone, as they have had subsequent additions by his followers and pupils. However, they cannot provide any evidence of the ethics of early Greek physicians. The earlier Hippocratic writings were concerned exclusively with "etiquette" rather than "ethics" i.e. to a "body of rules prescribing a certain behavior during the physician's working hours". In a society where no medical schools existed and where anybody was free to practice

medicine, abuses happened and went unpunished. The adoption of a strict etiquette not only established a sort of values governing sound treatment but also gave a personal pledge of safety to the patients who had no other protection. The Hippocratic oath, for its part, palliates to the earlier writings by bringing the new elements of rules of "ethics". To sum up, the early Greek period was religion-oriented and medical practice and behavior of physicians was governed by religion, while from the 4th century B.C. to the 1st or 2nd century, A.D., philosophy has a dominant influence and has helped shape up Greek medical ethics.

THE ISLAMIC TRADITION

As previously stated, no separate code of medical ethics is to be found in the Islamic culture, but the Koran itself is studded with hygienic concepts and the Koran strongly influences everyday life and deals with the interpersonal relations. It is believed that Mahomet himself had been influenced by his friend, Hareto Ben Caladah, a physician from Goundi Shapour school of medicine where he had been taught by Nestorian monks and Greek philosophers expelled from Athens by the Emperor Justinian I. Later, all the works of Hippocrates, Diorconides, De Tralles are translated into Arabic and the Greek philosophical thought is gradually assimilated by the Arabic culture, inasmuch as it is not incompatible with the Koran precepts. For several centuries, religion controls easily most professional activities, including medical practice, the more so because the empire is governed by the Khalifa (the successor of the prophet). When the Islamic culture reached its golden age, however, great physicians and philosophers complain that too many charlatans are practicing medicine and to exercise an efficient control over

the access to the profession suggest methods of candidate selection for the study of medicine, detailed curriculum of studies and rigid rules of examination. But these suggestions, whether from Rhazes (865 - 923) or Avicenna - the Prince of Physicians (980 - 1037), were never embodied in an official code of ethics.

THE CHRISTIAN ERA

The Christian tradition inherited the greco-roman legacy of medicine and pursued a tradition issued from Judaism but imparted with the new concepts of Christianity. After an early period of persecution, the church established itself quite strongly and deeply influenced every aspect of everyday life. Medicine more than any other profession, submitted to this influence. If the dogmatic assertions of Galen had any impact on medicine, it is only because they were sanctioned by the church and accepted by religious authorities. Besides, if in the Judaic tradition, rabbis were physicians, in the early Christian world, the only profession the church would allow the clergy to practice, was medicine. Since the clergy is not allowed to shed blood, physicians are not allowed to practice surgery. Whereas in the Hippocratic tradition, surgery is not practiced by physicians because it is considered as a lower craft, the church succeeds in imposing to all physicians what she forbids to the clergy.

One of the first principles of Christianity is that God created man "at his image". This implies two things: first that being a gift of God, life can be taken only by him - on the basis of which, euthanasia and abortion are unequivocally, condemned - and second, his image must, under no circumstances, be altered or damaged. It ensues that body-integrity has to be preserved by

the Christian physician. Thus castration is not allowed and controversies will arise concerning the eunuch singers of the Sistine Chapel Choir. Homosexuality and transvestism also are not tolerated since they change God's alleged will concerning the sexual identity of the individual. To preserve body-integrity, even after death, dissection of the human cadaver is not allowed, with resulting lagging behind of anatomical knowledge and surgical technology. It is only during the Renaissance period (ca. 1400 - 1600 A.D.) when people revolted against religious scholasticism that dissection was again allowed and that Leonardo da Vinci, Vesalius and others did their first dissections. As we have seen, religious institutions had a direct influence on the very concepts of the practice of medicine, in the early Christian times. Later on, the fact that they controlled university teaching centers, enabled them to exert an indirect influence on medical practice, and consequently, on the professional behavior of physicians.

The most tangible proof of this religion-minded and religion-directed medicine is the re-phrasing of the Hippocrates oath in a version labelled "The Hippocratic Oath as a Christian Physician Can Swear It". This implies a change in both form and content, concept and conduct. Although a rapid examination discloses only little change, this little change means a lot. More important than the replacement of the Greek Gods - although those cited are all related to medicine - by God the Father and Jesus Christ, is the fact that the "universality" concept of the Christian thought and faith is extended to the practice of medicine and is reflected in it. More than the first third of the original pagan Hippocratic Oath is devoted to the revered position of the master and restricts the teaching of medicine to the physician's sons

as well as his master's and those who would take the oath, exclusively. The Christian church, for its part, drops this elitism and extends the access to the medical teaching to "those who require it," Ambrosius' text adds: "as is necessary, right and fitting for Christians to learn it", implying that the teaching of medicine will be controlled by Christian concepts, a fact that has had a tremendous ~~open~~ negative - effect on medical science. For centuries, rather for almost two millenia, the church stuck to rigid principles: only the "natural" was allowed, and any interference with "nature" was sinful. Thus, from the start, castration was forbidden since it alters physically and morally God's image in his creature. However, a dissident Christian sect - the Valetians - taking literally Christ's words: "there are some who have made themselves eunuchs for the kingdom of Heaven", claimed castration to be indispensable for salvation. One wonders, however, if it is not, rather, a residual form of the ancient pagan ritualistic castration, performed publicly when celebrating the mysteries of Cybele - the mother of God. The controversy about castration lasted a long time. Its importance is in relation to two facts: First the eunuch singers of the Sistine Chapel Choir, a practice traceable as far as 1850 and second, that a large number of children - at one time more than five hundred in a single diocese in France, and the same in Italy - were castrated for hernia, an erroneous procedure, abandoned later.

In the 18th century England, in contrast with the Catholic concept prevailing in continental Europe and stressing the need to stick to "the natural" and not to interfere with it, Protestant ethics advocated "the study of nature for the glorification of God in His works". They so canalized the interests

of 18th century Englishmen as to constitute an important element in the enhanced cultivation of science. Numerous medical discoveries and a widening of the scope of medical practice ensued. The result was that, after centuries of a church-minded and church-imposed regulations for medical practitioners, a secularized code was evolved for the first time by Thomas Percival in 1803. This code will serve as a basis for the three Northern American codes of ethics which will follow after a few decades.

NEW PROBLEMS IN MEDICAL ETHICS

Before the 19th century, the church had been imposing its views in relation to certain issues: euthanasia and problems related to sexuality and procreation. To obey God's order that man "should multiply", no interference with the procreative process is permissible. Not only abortion, but any form of birth-control, including the "rhythm method", is precluded. St. Augustine stated that "the woman who does not get all the children she can have is guilty of homicide". The 20th century will add a long list to the previous controversial issues. In 1951, Pope Pius XII declares that "Nature and the Creator impose the function of providing for the conservation of the human race". It goes without saying, that, in this perspective, vasectomy, tubal ligation and sterilization are absolutely forbidden. Artificial insemination, test-tube gestation, foetus bank and genetic code manipulation, all considered by the church as "interferences with and manipulation of nature", fall in the same category. Other fields of medicine lent themselves to criticism by the church. When anesthesia and analgesia were first introduced, at the turn of the century or slightly earlier, they were questioned by the church. Was not pain a "natural phenomenon", part of God's will? How could the bible's statement: "Thou

shalt bring forth children in sorrow" be compatible with painless childbirth. The medical opinion was that obstetrical analgesia was not only not to be prohibited, but seemed even imperative.

With the increased sophistication of anesthesia, surgery and surgical techniques advanced with impressive strides. More and more people began to submit to a larger spectrum of operative procedures. The church, then, started questioning the "permissibility" of removing healthy organs (appendix, tonsils, gall-bladder, uterus, etc.), either incidentally (i.e. during an operation to remove another organ) or at the patient's request. To the new trend of considering that the individual had the right of absolute ownership over his body, the church opposed its view that this right is actually one of "reasonable administration" rather than one of "absolute ownership". This implies a principle of due proportion between the good to be accomplished by the operation and the damage and risk involved in it. Thus, organs can be removed only if diseased, or when the removal of a healthy organ is necessary for the suppression or the prevention of threat to life and health. Plastic surgery, which is viewed as the removal of abnormality, can be included in this category. But, induction of labour or Caesarian section performed for the convenience of mother or doctor are not morally justifiable. Operative procedures for transexuality are frowned upon by the church, on the assumption that they imply both a change in "nature" (i.e. against God's initial will) and an unnecessary (operative) risk.

The right to die (i.e. to choose both the time and quality of death, if one can so label a painless and dignified death) is claimed by the proponents of the right of absolute ownership over one's body. The church is of course

opposed to both the principle and its application.

Not a few issues remained, however, unsettled problems. The switching-off of life-supporting monitors, the definition of the "moment of death" either per se, or in relation to organ transplant, even the very concept of organ transplant are still the object of passionate debate.

For their part, Psychoanalysis and Psychotherapy have been frowned upon even more strongly on the assumption that they imply both a manipulation of the individual's mind and an encouragement of sexual permissivity and deviations.

Before the 19th century, the influence of the church on almost every aspect of medical practice was preponderant, even, after the Latran Oecumenical councils of 1139 and 1215 decided to forbid the practice of medicine to the clergy. In connection with the latter decision, it is probable that physicians, for their part, were allowed access to priesthood, as was the case with Bacon, Rabelais and De Sorbière.

The 19th century witnessed, mainly in France and the United States, movements of separation of the state and church. The results of such moves are rather complex. When, earlier, during the Renaissance, people had revolted against religious scholasticism, it was not so much a rejection of other-worldly values for worldly ones, but the development of new interests in this world, in addition to the constituted monastic ideals. As a result, a certain relaxation of rules had allowed, for example, the approval of dissection of the human body - a fact which Leonardo da Vinci, then Vesalius and others benefited from. But the principles and concepts of the Christian tradition were still pervasive. During the 19th century, the easing of the grip of the

'church allowed scientific discoveries and technical advances to acquire a faster pace. In the United States, although a principled separation of state and church existed - a separation carried through so strictly that there was not even an official census of denominations (sect membership) - the question of religious affiliation was almost always posed in social and in business life. It could be argued that, in contrast to membership in a church into which one is born, and which is obligatory, sect membership is a voluntary association of people who qualify after an examination and an ethical probation. But that does not change anything in the fact that both are, so to speak, religion-minded and religion-oriented. What is important is that these religious associations were the "typical vehicles of social ascent into the circle of the entrepreneurial middle class". And the medical profession is no exception to the rule. It ensues that the ethics of the practitioner's denomination unavoidably influenced his professional ethics.

Nevertheless, the era of secularization of the church, and of a desacralization of nature was dawning. This may explain, that, as early as 1903, there are reports that over 1000 New York physicians are asking the American Congress to allow euthanasia in certain cases - an unprecedented move. It is possible that such a move and the expectation of others, triggered a counter-attack by religious authorities. For, it is no mere coincidence, that, at the end of the 19th century, the Jesuit Fathers founded, in France, "La Conférence Laennec" which dealt with problems of deontology. This, in turn, inspired the formation of the well-known body "Les Amis de Laennec", after the 1st World War, and, in 1934, the "Conférence Laennec" was revived, and the "Cahiers Laennec" edited by a Jesuit, Father Larère became the official review of the French Medical secretariat. In the United States, the Catholic Hospital

Association's review was founded and pursued similar concepts and goals.

There is even a published code of medical ethics for this association, which is much stricter than the official code of the A.M.A.

We have seen, at the outset of this part, deeply religious cultures with no medical codes of ethics. It would be interesting to try to consider, now, the state of affairs in atheistic societies with existing codes of deontology. We have, for example, the case of Russia, where physicians, instead of swearing allegiance to the Gods of any pantheon, or to the profession, swear allegiance and promise loyalty to the state. The best interests of the state supersede those of the patient. Even the element of confidentiality, so much emphasized in both the pagan and the Christian oaths, is not respected and when the physician is employed in the industry, he acts as a means of control over the workers.

To sum up, a definite relation can be seen between religion and the medical codes of ethics. When religious influence is strong, religious regulations substitute themselves to the codes or rephrase pre-existing codes. Should secularization of the church or desacralization of "nature" ease the grip of religion or abolish it, new codes are devised. This swinging movement in the codes is thus initiated by the "religious pendulum", and one can say that changes in the former only reflect changes in the latter.

THE LAW AND MEDICAL ETHICS

THE CODE OF HAMMOURABI

The oldest known code, it deals with two issues only, the fees of the practitioner and the penalty incurred in case of injury to the patient. Even these, apply only to surgeons. Such a discrimination, if it stresses the high prestige of the physician's status, leaves, however, the patient unprotected. And, although quite limited in scope, we can consider this code as the first step in the long road which joins medicine and the law, and which starts the dialogue between them.

FREDERICK II MEDIEVAL LAW FOR THE REGULATION OF THE PRACTICE OF MEDICINE

Issued in 1240 or 1241, this law comes more than three millenia after the Code of Hammourabi. True, academic teaching had just started in the Western world and might have contributed to the emergence of the need of a code of deontology for increasing numbers of practitioners, but medical teaching had flourished for centuries in Athens, Alexandria, Gundi Shapour (Persia), Baghdad, Cordoba, etc. Incredibly enough, during this extensive period either governing bodies were unaware of the need of such a jurisdiction, or they felt that the tight religious regulations were a suitable and efficient substitute.

As mentioned earlier, these laws concern the educational requirements for students of medicine and for medical practice, the oath of physicians, regulations for apothecaries and for growers of medicinal plants.

The educational requirements are actually the first ever to be set officially. It is interesting in the fact that the length of study approximates the present

state of affairs in Western countries and the graduating procedures are not much different, except for the granting of the licence by the emperor himself - an absolute guarantee of strict application of the law i.e. exclusion of charlatans or incompetents. Embodied in the law is the special oath for physicians which comprises duties and interdictions and which stresses, for the first time, the imperative need to avoid conflicts of interests for physicians in their dealing with apothecaries. One can see that the problems of research physicians involved in pharmaceutical companies are not new; they differ only in degree. As Fox describes it, the potentials for conflict in such cases are great. The incompatibility between the tenets of scientific methods and the company's desire to be the first to market a new drug led to anxiety or ambivalence on the part of the research physicians, growing estrangement from their practicing colleagues and reduced control over the deviant physicians.

MODERN LAW AND IMPORTANT ISSUES IN MEDICAL ETHICS

LAW AND THE "MOMENT OF DEATH"

Society has always been aware that law does not create morality, but that it is only one custodian of it. But to be efficient, it is imperative that the law should keep pace with the changing medical situation. In fact, no field has witnessed more rapid change than medicine and many of the certainties of yesterday are questioned today.

In Shakespeare's "King Lear", Lear knew with all the certainty of madness:

I know when one is dead and when one lives;
She's dead as earth - Lend me a looking glass,
If that her breath will mist or stain the stone,
Why then, she lives.

(King Lear)

But Cordelia was dead. For a medical team of today, what are the reliable tests for life? How to define "death"? What efforts should be done to resuscitate? The resources of knowledge, the technology and skill which modern medicine use as an arsenal to fight death are now so extensive and so sophisticated that the question of the ethics of their use necessarily and unavoidably arise. This is but a particular, a specific application of the more generalized ethical question of the right use of knowledge and its concomitant gift of power. This question is as old as medicine, but knowledge and power have advanced so far - and so fast - in the last half a century, that the problems they present are new in degree, if not always in kind.

THE IMPORTANCE OF DECIDING "THE MOMENT OF DEATH" - AT WHAT POINT CAN A PATIENT BE PRONOUNCED DEAD? - ARE THE EXTERNAL TESTS OF DEATH INFALLIBLE?

These questions arise from a very important perspective: if the irretrievably unconscious patient is alive, he enjoys all the protection which the law affords to a living person, and, similarly, those who attend him are subject to all the duties, which, under the law, their respective positions demand. But, if the patient's vital functions of respiration and circulation are themselves kept in motion only by mechanical means, the law is confusing. The strictly ethical questions involved in the use of artificial means - as the iron lung respirator, heart-lung apparatus or artificial kidney - have been discussed, in recent years, within the medical profession and among theologians, particularly in the Roman Catholic Church ("ordinary and extraordinary means"). Such issues are sometimes revised in relation to organ transplant as it happened in the much publicized "Potter case" in 1963. A patient admitted to hospital after sustaining four fractures of the skull and extensive brain damage from a fall in a street fight, stopped breathing

fourteen hours after admission. Artificial respiration was begun by machine, and one of the kidneys transplanted twenty-four hours later in another person, then, the respirator was turned off and there was no spontaneous breathing or respiration.

Now, problems arise as to the legal definition of the moment of death. Did the patient die when he stopped breathing spontaneously fourteen hours after admission, or when the respirator was turned off twenty-four hours later? Was death due to head injury or to the removal of the kidney? Was the kidney taken as the patient was living, or after his death? A supposed distinction between "medical" and "legal" death raises still more problems.

. The problem of the irretrievably unconscious patient:

The unconscious patient is an object of pity, and pity, as an emotion, is more useful and serviceable when it is supported or combined with reason. The deeply unconscious patient is, as far as we know, "not suffering" at all. Therefore, any argument for shortening his life, based on pity for his "suffering" is misconceived - not to say a hypocrisy. Actually, it is those who care for him who suffer; and feeling this anxiety acutely, they project it into him - i.e. they ascribe it to him.

. By today's standards of medical judgement, they are incurable just as by yesterday's standards, a drowned person could not be restored to life. In a sense, agnosticism is sometimes a sharper spur to improvement and betterment than certainty.

. A utilitarian justification: In the clinical treatment and study of such cases - and only by it - can there be any hope of finding cure for others, for similar conditions. Many diseases, such as diabetes or tuberculosis, from which patients died a generation ago, can now be either cured or controlled.

. However, this raises another question: Is the patient to be treated as an end in himself or as a means to a further end, the advancement of medical knowledge? In other words, do we favour knowledge for man or man for knowledge?

. For the medical profession, the patient is treated, first of all, as an end in himself, and he is given, throughout any length of time of unconsciousness, all the medical and nursing care, because he is a human being. But even so, he serves vicariously another end, the acquisition and accumulation of knowledge, skill and technology which will or may benefit other sufferers. As a result, an ambivalence becomes almost unavoidable: the claims of the individual and society cannot be set one against the other for they are interrelated. The rule is that the patient's best interests have the precedence. Although the two interests often coincide, the decision is not always easy to take and assume.

. A utilitarian argument was advanced in "The Lancet". It invokes that, since the average length of a patient's stay in hospital is two weeks, an irrevocably unconscious patient, kept alive for a year - given the chronic shortage of beds - is kept so at the expense of twenty-six other patient's lives, whose admission has been correspondingly delayed. But one could answer that a shortage of beds should be solved by providing more beds, not by reducing the number of candidates for them.

. At what point can a patient be pronounced dead?

In the British Medical Journal of May 18, 1963, the case of the resuscitation of a drowned boy is reported. After having remained for more than twenty minutes in icy water and thought dead, he was admitted to hospital

and artificial ways of restoring breathing initiated successfully. Then, he stopped breathing five times in twenty-four hours, each time, being restarted artificially. Apart from a brief return to consciousness on the tenth day, he remained unconscious for six weeks. Afterwards he regained consciousness and his functions were gradually restored, so much so, that after six months, he behaved as a normal child - by ordinary clinical standards. This case, if it can prove one thing, it is that "the external" tests of death are fallible. Therefore, one should conclude that the results of the efforts for resuscitation justified the means.

LAW AND DECISION-MAKING

In the days when medicine was a craft, of which only the doctor had knowledge, the isolation of the doctor in his decision-making was more marked than it is today - but the range of possible decisions was more limited.

Today, the extension of medical knowledge puts into the doctor's hands far wider powers, and a wider range of choices. Besides, the dissemination of knowledge, brings the non-medical public in the possibility of understanding fundamentally what the doctor is about and involves more people as active participants in the doctor's decisions.

In modern societies though he recognizes the occasion, he must decide alone, the doctor decides, when possible, not for but with his patient and those concerned with him (in this connection, a study of health patterns, in various African cultures as well as in Amerindian groups, disclosed a fundamental participation of the family - either nuclear or extended

according to kinship patterns - in the consultation and decision process)

What a patient needs first is care and relief. In the second place, he wants restoration to health - i.e. normal functioning or the nearest to normal that can be achieved. Since preserving his life is a condition "sine qua non" of restoring him to health, it is the end to be pursued, but it is not, in itself, an ultimate. It is sometimes necessary and, thus, justifiable to risk life in pursuit of normal functioning - this is one of the daily facts of surgery. The Christian conscience allows, even, a physician or a surgeon - to take the steps necessary to relieve pain in terminal illness, even though they can be known to possibly hasten death. This is of course distinguished from murder by applying the traditional principle of double effect.

CONCERNING EUTHANASIA

In the city-states of antiquity, the rights of the human person were not clearly defined, but the influence of Christianity on Western thought made great and rapid progress in this domain.

In the XIIth and XIIIth centuries, pagan ideas began to revive and an English chancellor, Francis Bacon extolled what he named euthanasia - the science of making death "easy".

According to Jean-Paul Mensor, it was in the anglo-saxon world that concerted efforts were made by active minorities - at the end of the 19th century and the beginning of the 20th to obtain legal recognition for the right to euthanasia. Frequently, English and American legislators put forward legal projects in this matter. In 1890, a Boston surgeon demanded that suffering terminal patients should be assisted to their death

by analgesia. In 1903, more than a thousand New York doctors demanded euthanasia for cases of active, recidivous and generalized cancer.

Three years later, a bill is presented to the Ohio parliament by Miss Anna Hall proposing that any patient with incurable disease associated with great pain should have the right to request four persons to decide the opportunity of ending such a painful life. It was adopted at the first reading, but rejected by Washington. Nevertheless, this constituted the first legal approval of euthanasia. The following year, in 1907, Dr. Gregory proposed that persons suffering from incurable diseases, also badly deformed children and idiots should be assisted to death by analgesic means.

The reaction was appropriately firm: a conterproposal to the New York assembly stated that "any person, who by word of mouth, by written or printed circulars, by publications of any kind, advocated the duty of killing, under cover of the law, those afflicted with an incurable disease, physical or mental, should be declared criminally guilty".

Strange enough, always in New York, almost thirty years after (in 1937), 1200 doctors, favorable to euthanasia founded an association and in 1947, a legal project in favour of euthanasia was again introduced in the New-York medical assembly! It proposed that "every person of sane mind, at least 21 years old, and afflicted with a very painful disease, beyond remedy and for which the present resources of medicine can do nothing, should be free to seek euthanasia.

THE STAND OF THE AMERICAN LAW CONCERNING EUTHANASIA AND SUICIDE

Derived from the English Law, American Law is founded on a common law

permeated with the Christian spirit. Therefore, despite the formal separation of church and state, a legal proposal in favour of euthanasia comes up against a whole juridical system governed by a Christian conception of life, and which resists the introduction into the code of a law inspired by paganism

The methods proposed by euthanasia evoke the problem of suicide. English common law and the American law are very severe concerning suicide. A series of sanctions are designed to affect the reputation of the dead: the body is exposed in the main street of the town, his goods are confiscated and his memory held in dishonour. In Kansas, New-York state and Michigan, the accomplices are also condemned. The "suicide pact" as it is called is also condemned in Tennessee since 1908.

During the past decades, a new current of ideas led to the emergence of a young school of jurists, inspired by the philosophy of pragmatism, defined by Walter Kennedy as a "philosophy of law which seeks to adapt principles and doctrines to human circumstances, which they are to direct but, on which, they are not to impose so-called fundamental laws". This philosophy regards the law as a modern instrument to be used to serve the instruments of humanity. The task of the legislator is, therefore, "to discover the desires which society is striving to realize and to satisfy them with the maximum of facility". According to Kennedy, in "Pragmatism as a philosophy of laws", this sociological jurisprudence possesses no means of judging, nor does it possess any norm which enables it to decide the respective importance of opposed interests.

examination by two or three psychiatrists and a judge's signature to commit a patient for a limited period - 3 days - the renewal of which is conditioned by a psychiatric reassessment.

From the above, one can readily conclude that mere awareness or a stronger concept of individual and group rights as evidenced by new legislations has led in its time to specific additions and changes in the "rules of behavior" of medical practice.

KNOWLEDGE AND MEDICAL DEONTOLOGY

DEVELOPMENT OF MEDICINE

If one considers carefully the unfolding perspective of medical knowledge through the ages, two facts draw the attention. First, a continuum can be easily visualized and second, along this continuum, changes can be witnessed. The latter reflect the changing explanation of illness according to knowledge of the times and in adaptation and innovation in the organization and practice of medicine.

As a reminder of the polymorphic origin of medicine, Oliver Wendell Holmes says in his Medical Essays (1883) that "medicine learned from a monk how to use antimony, from a Jesuit, how to cure agues, from a friar how to cut stone, from a soldier how to treat gout, from a sailor how to keep off scurvy ...". We will try, however, to follow a more or less systematic scheme to see how medical knowledge has changed from the Cro-Magnon man, some 20,000 years ago to modern times, and how this change has influenced medical practice and medical ethics.

In prehistoric times, disease was believed to be caused by evil spirits which entered the human body. Consequently remedies were largely magico-religious in nature, consisting in magic spells and incantations. Needless to say, such beliefs persisted for millenia and it is not infrequent to find them, even today in isolated cultures.

ANCIENT EGYPT

Although ancient Egyptians were deeply religious and although religion pervaded every aspect of life, including medicine, we can witness a kind of medicine based upon observation of facts i.e. a scientific medicine.

According to their theory of the "pneuma" (air), life and death are transported by air. This theory seems to have had a lasting influence since it is the basis of the teachings of Eristratus of Alexandria in the 3rd century B.C. and of the pneumatists of Rome at a later period.

At least two important papyruses - the Eber's and the Edwin Smith's - deal extensively with medicine. The former is almost a medical encyclopedia of the time and the latter is an "exposé" of 48 cases, which are presented in a logic order and treated in a very scientific way. Both disclose several important facts. First, division of labor and extensive specialization characterizes pharaonic medicine. Every organ, every disease is the field of a corresponding specialist. Yearly military expeditions and long construction projects imply a large number of surgical casualties. No wonder, then, that surgical technology and arsenal were advanced. As early as 1250 B.C., trephining is performed - besides, reduction of fractures and dislocations, circumcision and fistula operations are current practices. A rich pharmacopia is also used, and, may be, for more safety, physicians prepare themselves their own prescriptions. However, tradition is so sacred that a physician is expected to prescribe only what learned masters of the past have advised, failing which, he could incur the death penalty. Finally, as was mentioned before, to adapt to the active social life of the time, social medicine and industrial medicine are born and adapt themselves to the current needs of the epoch.

BABYLOLIAN MEDICINE

For Babylonians - as for Hebrews - disease is believed to be a punishment of the Gods. Therefore, treatment will consist of appeasing them by incantations and exorcisms, the choice of which requires divination. This is

achieved by various means. Being brilliant astronomers and calculators, astronomy is probably their first choice. Next come dreams and finally divination by examining the liver, either of a sacrificed animal (Greeks and Romans used the intestine) or only a clay-made liver. Besides these priest-physicians, one could find "traditional" physicians and surgeons, the former using extensively medicinal herbs (camomille, mustard ... etc.) or bitter products intended to displease the evil spirits which inhabit the patient. Probably because their approach - evil spirit-oriented - is closer to the "orthodox" Babylonian concept of disease, physicians enjoy a privileged status. They are, not only highly revered, but - and this even stresses their status - they do not submit to the code regulating malpractice, the Code of Hammurabi applied only to surgeons and apothecaries or herbalists.

JUDAIC MEDICINE

Contrary to what would have been expected, in spite of four centuries spent in Egypt, Hebrews did not benefit from pharaonic medicine. This may be attributed to a tendency for a total rejection of foreign medicine, as evidenced by the Talmud remark that "the physician who comes from afar is like a blind man". Since the purity concept is pre-eminent in the Judaic tradition, it follows that hygienic prescriptions have a large place in their life, and constitute the main bulk of their medical knowledge and practice. Strict precautions against and compulsory notification of communicable diseases as diphtheria arise in this tradition, so early in history. For comparative purposes, this regulation was not introduced in France until 1902.

One cannot grasp, in Judaic medicine, a "directive" principle dictated by physiology or pharmacology. There is no theory or all-encompassing idea

subsuming medical practice but rather various and isolated medical and surgical actions.

However, this medicine is a mass-medicine or a community-medicine, where the best health interests of the community are a priority. It did not seek, apparently (and did not contribute, actually) to add anything to the medical knowledge of the time.

GREEK MEDICINE

Greek medicine is conveniently considered under pre-Hippocratic and Hippocratic periods. Pre-Hippocratic medicine extends to the 5th or 4th century B.C. and does not differ from other early medicines based on the belief that disease is due to evil spirits and cure effected by magico-religious procedures and rituals.

Hippocratic medicine, on the other hand, betrays an intellectual revolution. The approach to the practice of medicine is radically changed. It becomes dispassionate and proceeds from a more or less scientific point of view.

Two important theories concretize this thinking: the Humoral theory proposed by Hippocrates and his followers and the soul-theory postulated, at a later time, by Aristotle:

The Hippocratic theory of illness assumes that the body is vested with four humors: blood, phlegm, black bile and yellow-bile. When these humors are in equilibrium, the body is healthy. Imbalance in their proportionate representation is associated with disease. Symptoms are seen as the exuding of the over represented humor and therapy relies on the restorative powers of nature,

supplemented by various diets and, infrequently, certain drugs and potions.

What characterizes the Hippocratic teachings is the rational, cautious approach to medicine, based on careful and detailed observations made at the bedside and in nature. As Rodney Coe remarks, in "Sociology of Medicine" (1978 - page 174) "many of the insights based on these early observations are still an accepted part of the body of contemporary medical knowledge".

The intellectual revolution which helped shaping and perpetrating the Hippocratic concepts of medicine, gave birth to a twin: the principles of medical ethics embodied in the Hippocratic oath - these principles which have motivated the medical profession from ancient times to the present.

In the past sections, the Oath has been analysed in different perspectives. We will try here to consider those aspects which are more directly related to knowledge. The admonition not to engage in surgery, but to leave that to the practitioner of that craft reflects, no doubt, a division between the brotherhoods of medicine and surgery and suggests an early specialization in medicine. However, the reason for the prohibition is obviously that, at the time of Hippocrates, so little was known about the human body and about the uses of surgery that death of the patient frequently followed an incision. Since the Greek physician was not to use the medical knowledge to take a life, it is no wonder that this was left to others (who were considered to practice an inferior craft).

We also notice, that the first part of the oath is devoted to the revered position of the teacher and his family and the obligation of teaching his sons the art of medicine (along with duly apprenticed persons, who have taken the oath). This privileged status of the teacher is a direct and natural result

of a newly established academic and scientific medical teaching, where maximum control over the pupils is necessary and can best be entrusted to the master, who is, after all, the bearer and depository of knowledge. Such knowledge and knowledgeable physicians are even so valued that Greek medical practice ends by being organized on almost two planes, or as Coe says, "two kinds of medicine for two social groups":

Scientific medicine practiced by physicians for the rich and the aristocrats - the equivalent of private practice - and a condensed version of medicine given by the physician's assistant to the poor classes, including slaves - public medicine. The Aristotelian "soul theory", for its part, postulated that each human body contains three souls: a vegetative soul, accounting for the ability to nourish oneself; an animal soul which gives humans a sensitivity for responding to their environment; and, finally, a rational soul, which gives humans the power of enlightenment.

After Aristotle, the center of the intellectual world shifted to Alexandria where a new school based on Aristotelian writings, was founded. Two physicians of this school - Erasistratus and Herophilus made contributions to anatomy and physiology, both empirical and through dissection of the human body. Erasistratus proposed a new theory, based on Aristotle's soul theory. According to him, the vegetative soul is distilled in the animal soul. After being carried to the lungs for replenishing through respiration, further distillation takes place in the brain to produce the rational soul which is then radiated to all parts of the body by the nervous system. Carrying on from Hippocrates' humoral theory, Alexandrian physicians postulated that disease was caused by an imbalance in the distribution of souls in the body. Excess of blood in the vegetative soul reduces the sensitivity (of the animal soul) and the rationality (of the rational soul). The remedy could not logically be anything else than

blood-letting; "a therapeutic practice, based on Aristotelian logic and theory, and which was carried on until the nineteenth century", according to Siegerist (1951). One should not be surprised to see that a therapy could continue to be used long after the rationale for it had disappeared or been discredited. Two explanations are proposed for this phenomenon. First, the fact that people favor instinctively a theory like the greek one, which oversimplifies theory by looking for a single cause for disease with consequent oversimplification of therapy. Second, many therapies, like the blood-letting, were practiced on a traditional basis, and were accepted uncritically, particularly if justified on religious grounds or espoused by a recognized authority.

ROMAN MEDICINE

After Athens and Alexandria, the locus of culture of the ancient western world shifted to Rome. The roman contribution to medicine, however, were not medical innovations as such, but rather the codification and organization of medicine. Vasso, Celsus and Plinē, the Elder were three encyclopedists who carried on a selective codification of medical knowledge. They gathered the knowledge with which they concurred and rejected the rest. Consequently, several medical sects, almost medical faiths developed: the Dogmatists, who followed the Hippocratic humoral theory, but without its empirical approach, the Pneumatists who held to the theory and blood-letting practice of Erasistratus, the Empiricists who rejected theoretical frameworks and used any remedy which seemed to work; the Methodists who followed the Aselepiades theory of disease ascribed to contracted pores and the Eclectics who selected parts of each of the other sects.

The Romans initiated the organization of medicine, as an extension of their military organization. The important contributions, however, apart from public sanitation, reside in two institutions: free public medical teaching, in contrast with the very restricted and selective Greek medical teaching, and free care for the poor. Having succeeded in preserving the accumulated medical knowledge for the posterity, they probably felt they could, without risk, universalize the access to its instruction. They also protected the public against malpractice by issuing a series of appropriate laws. Finally, Galen (130-200 A.B.), by his dissection of apes and pigs (since dissection of human body was forbidden) contributed to the study of anatomy and physiology. Because they were sanctioned by the Church, his dogmatic assertions had a considerable impact on the development of medicine.

MEDIEVAL MEDICINE

With the fall of the Roman Empire, a period of about ten centuries, from the 4th to the 14th centuries A.D. follows, during which dogmatic religious scholasticism will prevail, pushing aside all the sciences and foremost, medicine. The empirical approach - in which truth is inferred only from evidence based on scientific observation - is replaced by a philosophical approach to knowledge where truth is deduced from accepted religious premises, without any reference to the real world. As a result, the population was reduced to an almost nonliterate existence. In the medical field, much of the scientific methods and nature developed by the Greeks was lost. Religious dogmatism prohibited the dissection of the human body, denied free inquiry, experimentation and confined acceptable knowledge to ancient texts approved by the Church. Since, according to religious teachings, disease and illness were considered, not a pathological state, but

as a punishment for sin, seeking secular medical aid was considered as showing a lack of faith in God. On the other hand, ecclesiastical and royal powers were viewed as having "healing" effects. As Saxon, Nordic and Slavic people came in contact with Christian philosophies, they brought in their folk beliefs which were added to the remnants of ancient learning. In the cities, however, there remained a few physicians, well versed in Galen and Celsus and other approved masters.

The dogmatic religious scholasticism, imposed by the Church permeated, later (around the 10th century), three other areas of medicine: First: University teaching, which began in Salerno, Italy followed the Church philosophy in the sense that the canons of Hippocrates, Aristotle and Galen were taught as a matter of faith; with the exclusion of their methods of research and observation. Second, the practice of medicine itself suffered a great deal. Since medicine was the only profession the Church would allow the clergy to practice and since a priest could not shed blood, surgery was forbidden to physicians and relegated to a lower craft. Finally, the hospital system, formerly under government auspices, came under the control of the Church, with resulting reasonably good quality of care but lack of medical knowledge.

Medieval science was plagued with epidemics: Between 1340 and 1360 - in only twenty years - the population of Europe was decreased by one third. But, one can say that two positive practices ensued: first, a renewed attention to case histories as could have been expected from the observations of the symptoms of plague. Second, the evolution of quarantine as a preventive measure. Probably influenced by the Judaic tradition, the Church believed leprosy to be contagious and thus advised -

rather ordered- isolation.

The University of Salerno had initiated the academic teaching of medicine around the 10th century. In 1240 or 1241, the Emperor Frederick II issued his famous Law regulating medical instruction and medical practice. It seems that after more than two centuries, the need was felt to give medical teaching the strict rules and regulations that are the only guarantee of an adequate standard and to exert an efficient control both on the training and licensing procedures and on the everyday medical practice.

THE RENAISSANCE MEDICINE

The Renaissance, which includes roughly the 15th and 16th centuries, witnessed a period of transition between medieval and modern thought. Two major events mark this period. First, a basic change in values in the Western world occurred. People revolted against religious scholasticism and began to consider that life in this world was worth trying to make better rather than waiting for the promised rewards of the hereafter. In the field of medicine, dissection of the human cadaver was again permitted, with resulting anatomical discoveries by Vesalius, Fallopius and Paracelsus in Italy and Ambroise Paré in France. The latter, a surgeon, developed new surgical methods, especially in relation to war casualties. Second, the rediscovery of ancient literature stimulated the resumption of the scientific method of observation and recording which led the Renaissance physicians to rebel against the writings of the ancient masters. However, the scholastic habit which prevailed for 1000 years could not be completely

destroyed in only 200, and many pioneers still believed in alchemy, potions and drugs.

SEVENTEENTH CENTURY MEDICINE

This was a period of contrast in medicine. The Renaissance had witnessed the breaking of the scholastic grip of the church over medicine. Dogma gave way to observation and experiment, faith to logic and reasoning. Now, new data were collected and analysed scientifically, but this added medical knowledge lacked an outlet in medical practice; new tools and equipment were invented, but their application was largely overlooked, and finally there were advances in clinical medicine, but no organization or classification of these improvements had been started.

Among the important discoveries, was the circulation of blood, by Harvey in 1628 - a theory which was not immediately accepted, since it diverged from Hippocrates' humoral theory. Harvey, himself, despite his major discovery and his challenging of Galen's theory continued to be a dogmatic follower of humoral theory and, incredibly enough - but in the line of the contrast which characterizes this century - to use drugs without any rational basis.

Thomas Sydenham, considered by some as the greatest physician of his time, had the great merit of stressing the need to distinguish between patient and disease. He saw specific symptoms in his patients and expected to see them reappear in other patients with a similar disease. But identification of the various symptoms progressed more rapidly than organization of these data into a usable and practical classificatory system. Therefore, practicing physicians unable to apply their new knowledge, continued to practice medicine based on the ancient teachings.

This lagging between acquisition of new knowledge and making use of it is reflected in the fact that, despite the great discoveries and associated conceptual changes, medical practitioners still stuck to the Hippocratic oath (in the slightly modified Elizabethan version), exactly as Harvey continued to be a follower of the humoral theory with which he did not concur.

EIGHTEENTH-CENTURY MEDICINE

The same trend described in the 17th century prevails in the 18th. The contrast even extends, leading to a wider separation of the polar types of medical practice. Scientific medicine becomes more distinct from primitive and folk medicines. The university centers had shifted westward from Padua to Glasgow, Edinburgh and Leiden. Here, the emphasis on scientific medicine was stimulated and fostered resulting in further additions to the growing fund of medical knowledge. New tools were developed - the thermometer and the forceps - as well as new drugs, like digitalis and Cinchona and finally the small-pox vaccine was discovered by Jenner and published in 1798, before the advent of the germ theory of disease.

Despite these advances, medicine had not become completely scientific. It had not yet assimilated the rapidly growing body of facts. Unable to apply the new knowledge, the practicing physicians were forced to continue traditional therapeutic practices with generally poor results. This of course led to lowering of their previous high prestige and social status. Non-medical persons began offering cures and quackery and charlatanism prevailed. Advances in medicine were made despite the prevailing climate of opinion and progress in medical research was impeded by lack of specialization, lack of facilities for clinical research and lack of time available for research as a result of the heavy case load of each physician.

MODERN MEDICINE

Modern medicine can be said to have started in the latter half of the nineteenth century. A bewildering array of inventions and discoveries characterizes this era. A particular aspect of these novelties was their use as a means of getting at and exploring the "internal environment". The first to be invented was the stethoscope in 1816, then followed the ophthalmoscope in 1851, the laryngoscope in 1855, the stomach tube in 1867, the sphygmomanometer in 1887.

Biology, for its part, moved from an organismic to a cellular level and physiology and bacteriology were studied at that level. It epitomized with the formulation of the germ theory of disease which led to the dominance of a unitary etiology and a search for specific disease agents. Surgery made great strides following the development of anesthesia and asepsis.

Outstanding European researchers in cellular pathology were the German Rudolf Virchow (1821 - 1902) who demonstrated that cell growth originated in preceding cells, and the Frenchman Claude Bernard (1813 - 1878) who founded endocrinology, Louis Pasteur (1822 - 1895), who developed the process of pasteurization and provided conclusive evidence for the germ theory of disease, and Robert Koch who discovered several microbes, including the tubercle bacillus which was responsible for over one-seventh of the total human deaths of that time. Aseptic procedures were introduced by Joseph Lister (1827 - 1912) and immunology was begun.

The twentieth century consolidated previous knowledge and accelerated the tremendous strides made from 1875 to 1900. The advent of two major wars provided opportunity for improvement of surgical techniques and experimentation.

with drugs and antibiotics. Finally, medicine embarked on exploration in the space age.

What took roughly 2500 years for medicine to progress from its Hippocratic foundation to its present state, occurred in North-America in about 250 years, passing in a vertiginous form through all the stages that had taken centuries in Europe.

The consequences of some of these innovations, however, have served to raise questions about aspects of contemporary medical ethics. While the Hippocratic oath, with its modern form is still the ethical guide, technology has contributed to situations which did not exist before, and for which the guide is inadequate. For example, the dramatic extension of life expectancy in modern nations, brought about, at least in part, by application of modern medicine is associated with new ethical situations in population control. These include family planning, genetic engineering and euthanasia. In dealing with the rising prevalence of chronic "incurable" diseases, also a consequence of medical technology, ethical questions are raised, about the use of life-support equipment. Thus, the "value" of a human life changes with age, degree of incapacity and ability to perform social roles. Death may be preferred by the patient, but the present code prohibits the physician from giving or even suggesting a lethal drug. Yet, the code does not provide a clear guide to physicians as to when the use of life-support equipment is no longer in the patient's best interests. Similarly, the implications of medical technology, in practice, has led to a revised definition of the concept of health and to changes in the relationship among social institutions of medicine, religion and law.

To sum up, one could say that, even in modern times, "the hiatus between the developments of medical science and their application to medical practice" described by Coe (1978) is reflected in a similar gap or lagging between the present ethical guide and the new ethical questions and situations which have arisen in the last decades and which are still unsolved issues.

THE SOCIO-ECONOMIC BACKGROUND AND MEDICAL DEONTOLOGY

In the previous sections we have considered changes in medical deontology in relation to parallel changes in knowledge, religion and law. In the following we will try to verify the link between decisions of change in medical codes of ethics and corresponding variations in the socio-economic environment. We will also try to uncover the social basis on which is founded the way a profession as medicine is perceived by other professions and institutions and by society at large. For these and associated factors have much to do with the emergence of a new code of ethics or a revised interpretation of the original one.

In their "Sociology in Medicine", Susser and Watson remark that "man's economic and social environment is part of his natural environment and helps to determine the incidence and prognosis of disease". Actually, it does more. It helps determine the kind of medical practice and ultimately the kind of medical profession itself. For the medical profession is not an island in the social-ocean - it continually interacts, not only with individuals, but with all the institutions of this society, and the avenues it will follow will be determined by the way it is perceived by society as much as by how it perceives itself.

Let us see first how medicine perceives itself. Sir William Osler, the well-known psychiatrist and philosopher, said at the end of the 19th century:

It is no idle challenge which we physicians throw out to the world when we claim that our mission is of the highest and of the noblest kind not alone in curing disease but in educating the people in the laws of health, and in preventing the spread of plagues and pestilences; nor can it be gainsaid that of late

years our record as a body has been more encouraging in its practical results than the other learned professions. Not that we all live up to the highest ideal, far from it - we are only men. But we have ideals, which means much, and they are realizable, which means more ... the rank and file labour earnestly for your good, and self sacrificing devotion to your interests animates our best work.

Needless to say, if Osler was quite sincere in his "credo" of Hippocratic philanthropy - to which he devoted most of his work - others, even in the medical profession have a different perspective. John Knowles, a physician himself, claims that "the doctor prefers independence and seems to have become, at least collectively, a problem to the United States government, as he had, at times, to the governments of Belgium, Italy, Great-Britain and Saskatchewan". And he adds "can anyone argue today that the health of professions along with its various institutions is not being ruled by the ideal of economists and political philosophies? What is implied in this view, is obviously a much "less idealistic" concept of the practice of medicine. This realistic stand is shared by Eliot Friedson. In his "organization of the medical practice (1979) he forecasted that the future organization of medical practice would be determined by many factors, not the least of which is political. He also stressed the close involvement of socio-economic imperatives, and pointed to the concern expressed about the cost of national health-care systems.

For their part, Susser and Watson remark that, in every society, systems of law, customs, moral imperatives and institutions mould the personalities and aspirations of successive generations. "It is in this sense", they say, "that man is the victim of his social relationships". But custom is not king,

and, in their unceasing interaction with their social heritage, people in every society continually accept and reject, rebel and reform and, thereby, help to change the social system. As there is "an interdependence" as Denton rightly claims "between the economy, the political system, the educational system, the ill (and, unavoidably the "healer"), one can expect a change in a system to lead to a change in the other.

PROFESSIONALIZATION OF MEDICINE

All along this study the term "medical profession" has been used without questioning, as an accepted fact. To be able to understand the objective position of the "medical profession" in the society, it will be necessary to understand the very concept subsumed by the term. According to some "the concepts "profession" and "professional" conjure up an image of prestige, trustworthiness and responsibility. Often they conjure up an image of the physician as well, for no other occupation in our society has gained as much prestige, power and autonomy as has this one".

However, one must distinguish between "profession" and "professional" for the failure of making such a distinction is a major point of confusion in the profession's literature. The profession refers to a special type of occupation, whereas the professional refers to a special type of person. It is difficult to define exactly what a profession is. For Denton, the essence of the concept seems to reside in an image held by the community and by society. It is an image of an occupation held in high esteem, whose members are trustworthy and fulfill some useful function. The assignment of the label "profession" thus seems based on the community's and society's acceptance of the image purveyed by the occupation. Discussions arise, however, over exactly what profession is, over the stages in becoming a profession and about the attributes of a profession that can distinguish it from other occupations.

Two approaches can be taken in this quest for information, the historical and the ahistorical.

The historical approach is concerned with defining the steps that occupations go through in becoming professions. Wilensky (1966) defines these as follows: first; members of the profession do some job full time; second, they establish a linkage with a training institute; third, they establish an association; fourth, they obtain legal sanction; and fifth, they construct a Code of Ethics - A major critique of this approach is that there are many occupations that have gone through the above steps but are not considered professions by the community and society. Thus, going through the steps is not sufficient in itself to guarantee assignment of the label "profession".

The ahistorical approach, for its part, has been concerned with defining attributes of professions that distinguish them from other occupations. A major source of conflict and confusion, in this perspective, is the varying number and types of attributes defined by different authors. Goode, starting with two basic attributes (a body of knowledge and a service orientation) expanded the two into eleven characteristics of a profession. Greenwood defined five, Foote, three and Friedson in term of one trait (an occupation which has assumed a dominant position in a division of labor so that it gains control over the determination of the substance of its own work). The characteristics of a profession, are, however, numerous.

CHARACTERISTICS OF A PROFESSION (ACC. TO ELIOT FRIEDSON)

1. Knowledge

Professional expertise is dependent on an extensive body of theoretical knowledge. The development and acquisition of such a knowledge is usually sought for its own sake as well as for its intended application

in practice. It is highly technical and phrased in terms not generally comprehensible to persons outside the profession - the various specific jargons of the specialties. A monopoly of this knowledge is usually maintained by the professions and the expertise of the members of the profession is usually accompanied by increasing social status relative to non members of the profession. Dissemination of professional knowledge is guarded, in part, by the technicality of language, but more, through the establishment of formal organizations designed for that purpose - the professional societies. The latter provide the professions with the power, or the means of control over who enters and who completes the program of professional training and who is awarded full privileges of professional status.

The body of knowledge is usually extensive and often difficult. It requires a long period of training to master it. In medicine, it is well known that several years of training - beyond the basic university education - are required to master the appropriate amount of the knowledge and achieve admission in the professional brotherhood.

2. Service to the Public or Collectivity Orientation (an "other orientation")

During the training period, the trainee is taught more than just the technical aspects of his profession. In fact, he is inculcated attitudes and values as well as a particular way of looking at the world. Central to the status of professional is an "other orientation", involving the offering of a service to the public and which has been coined by Parsons as "a collectivity - orientation". The professional is expected to place the needs of clients requiring his help above his personal desires. This orientation is designed

to prevent the exploitation of the lay person by the professional, any conflict arising being always settled in favour of the client. The potential for conflicts is higher than might be thought, since even though professionals offer a technical service to the public, they must also make a living of it.

3. Collegial Organization

Equally important as learning attitudes and values associated with dealing with clients is learning how to collaborate with fellow practitioners. Relationships among professionals are characterized as having a collegial organization, (as opposed to a bureaucratic one) - professionals band together. This solidarity grouping serves two purposes: to protect themselves from interference by extra professional persons or groups and to protect others from their own members who may behave unprofessionally, either from incompetence or unscrupulousness. Through this collegial organization, they, and only they (the members of the profession) set the standards of behavior for their profession and enforce or control the compliance of all the members with the approved standards. Would it not be for the expertise of its members and their claim that only members of the profession have sufficient knowledge to be able to judge the quality or standard of performances of a fellow-member, this kind of organization would not have been possible. Since mechanisms are necessary to check the members of a profession from exploiting lay persons, and since (the collegial organization is the only accepted expert/judge in the matter) to devise such mechanisms, it follows that this kind of organization remains, usually - at least theoretically - impervious to and independent of outside influences or interventions, thus enabling the profession to develop in an autonomous way.

4. LICENSE:

The license or right to practice a profession - symbolized by the diploma hanging on his office wall - is an evidence that the practitioner has achieved an approved level of competence and is recognized by his fellows.

5. MANDATE:

The profession has, or claims for itself, the mandate, i.e. the right to declare the standards and to define the goals to which the public should aspire or which he should expect. This means that it is the profession which determines good health standards and defines good health practices. Moreover, the public is expected to accept and aspire to those standards. Needless to say, as we will see later, this concept of autonomy and mandatory role has its opponents as Ivan Ellich and Irving Zola.

6. The power to control who enters the profession, to determine the standards of performance and to keep the evaluation of the profession in the hands of its members.

7. The increased rewards from professional status, in terms of greater income, prestige and power.

8. The tendency for members (of the profession) to identify strongly with their profession, a tendency much more pronounced with professionals than with non-professionals. Consequently, there is little or no tendency for members to leave it for another kind of work, as occurs in other occupations.

MODEL OF PROFESSIONALIZATION

For Denton (1978:182) the model of professionalization comprises five attributes:

First, education is adopted as "an indicator of the presence of a body of knowledge within the occupation". Whether the level of education is actually related to skills, quality of work, competence, etc. is uncertain, however, in the society, there are widespread beliefs that it is. Thus, professions are expected to have a higher level of education, and occupations desiring to have profession status can be expected to strive for higher educational level.

Second, a code of ethics may indicate to the public the good intentions and confidentiality of the members of the profession, namely, their alleged service orientation.

Third, licensing of professionals shows the community that the professional has met certain skill requirements, has been examined and has been found fit to serve the community.

Fourth, the presence of professional association implies an organized body working to upgrade standards, to control its members, to standardize licensing, etc.

Fifth, some mechanism of peer control within the occupation will give an appearance of professional self-control and orientation to service. This mechanism can also be used to argue for greater autonomy.

A closer look at these five attributes will indicate that they are actually varieties on which an occupation can increase or decrease in value.

Two questions arise: is this model, the actual route to status as a profession? And, if this is actually the route, will many of those now following the model actually reach the goal? Only time will answer these questions. However, certain statements can be made about these occupations, their structures and changes within them.

First, the direction of change in occupation can be predicted. For instance, it is expected that the years of education required to enter a field will increase over time rather than decrease. Second, major areas of emphasis, debate and resource expenditure may be predicted. Third, a statement that one profession is more professional than another or that an occupation is or is not a profession will be difficult to support when professionalization is viewed from the model presented above.

The drive for professionalization appears to be widespread among the medical occupations and several potential consequences are attached to this phenomenon.

First, an overall higher level of education among the medical occupations, with both positive and negative implications, i.e. on the one hand, a better quality of service to medicine, and on the other hand, a limitation of the flexibility of personal input into the field. Second, an increase in the number of occupations whose members are locked into specific roles in hospitals and other health agencies. Third, an increase in the number of medical occupations, because when occupations professionalize, their members come to re-define what is considered appropriate work and new occupations arise to per-

form those tasks considered inappropriate. Fourth, further boundary conflicts over who is more and who is less professional, over who is professional and who is technical, over who is educated and who is trained.

DEPROFESSIONALIZATION OF MEDICINE

Although the present trend in the United States is toward greater professionalization, it has been proposed in recent years that, in the future, deprofessionalization, or a reversal of present trends will occur. In "Deprofessionalization and its sources" (1975:328-337) Häng, defines this as "a loss to professional occupations of their unique qualities, particularly their monopoly over knowledge, public belief in their service ethos, and expectations of work autonomy and authority over the client".

The causes to which deprofessionalization could be ascribed are threefold:

First, the continuing development of knowledge, because as knowledge becomes more specialized and standardized, the ability to specifically codify tasks in a routine manner will increase and the mystery of the job, which was part of the essence of the profession will be lost and the profession will become like other occupations. Second, occupations may be forced by outside forces that perceive the professionalization process as dysfunctional to reverse their moves toward profession status, as is reported to have been the case in China where the extensive education required by the medical occupations and the firm boundaries that developed among them was perceived by the state as dysfunctional. Third, the present trend toward joining unions by many members of occupations that have been claiming the status of professions has implications for deprofessionalization. The image of the profession and the image of

the union have, traditionally, been contradictory. The significance for deprofessionalization lies with the images of each, the union and the profession.

BUREAUCRATIZATION OF MEDICINE

Large scale organization of activities is now typical of industrial societies, not only in the fields of economics, production and commerce, but also in government, education, politics and religion. The emergence of bureaucratic administration in almost every sphere of life has not left medicine untouched, and has influenced relations between doctors on the one hand and their patients, colleagues, members of the auxiliary medical professions and the community as a whole. Elaborate equipment, specialized skills and complex procedures necessarily accompany scientific advances in medicine. The new technology and the treatment that it offers are beyond the means of most patients: it can become available to all only when organized on a large scale. The modern hospital is an institution organized for this purpose. With every technical advance in medicine, new specialists have appeared, each requiring a separate department. As a result, the same patient may be dealt with by a number of doctors, both inside and outside the hospital. Fragmentation of responsibility has ensued. On the other hand, the complexity and cost of modern specialized medical care is such that single-handed, a doctor cannot provide all the skills and facilities for treatment, nor can many patients afford to pay an economic fee. This has led to various modes of organizing medical care in industrial societies, from private individual and group insurance schemes to a national health insurance.

This has started in Britain in 1948 and in the United States in 1966, with the implementation of Medicare and Medicaid.

The National Health Service has been described as a bureaucracy in an uncomplimentary sense, particularly by doctors. Because doctors have a long tradition of individual responsibility and decision, they are suspicious of new developments that they believe might challenge this tradition and lead to the regimentation of medicine and medical care.

While the word "bureaucracy" serves as a useful pejorative epithet for those defects in large-scale organizations - particularly governmental - that pervade contemporary society, it stands for something more positive. It is actually a particular form of administration, marked by an exact division of labour and a hierarchical distribution of authority. Bureaucratic administration is an effective mode of organizing both people and material on a large scale. This is no less true of the administration of health services than of other organized activities.

NATURE OF AUTHORITY

To understand the concept of authority, it is necessary to explore the ways by which authority is disposed. Three models of authority are described.

First, traditional authority, as with chiefs and monarchs. This is bounded by tradition and its rule is personal. Second, charismatic authority which depends on the individual's capacity to convince others that he is entitled to their obedience. Religious and political leaders fall in this category, as well as doctors in modern general hospitals, according to Susser and Watson (1971:251-253). Third, bureaucratic authority, that is a system of offices

arranged in a hierarchy of authority, those at the top having more authority than those at the bottom. The hierarchy of offices is based on a continuing system of rules and regulations, which precisely define the authority of each office, so that centralization and continuity of control are assured.

Concerning the charismatic authority vested in a doctor, it has been noticed that educated patients are likely to find doctors less charismatic than are ignorant ones, and are more likely to question his procedures and conclusions. Mutual dissatisfaction between doctors and their patients was found to be more common in higher class, better-educated areas than in lower class areas.

AUTHORITY AMONG DOCTORS:

A distinctive feature of hospital administration is that, in some respects, the hospital is an acephalous organization, because administrators cannot exercise authority over the functions of those who carry out the most important task in the organization, namely, the doctors. This particular situation arises from the particular nature of the medical profession itself, and the source of the doctor's authority and responsibility.

In the medical profession, especially in the hospital setting, the professional behavior of doctors is controlled through a complex system of social sanctions - informal and symbolic. Other sanctions are rarely involved. On the other hand, the mode of induction to the profession gives the doctor a high intrinsic satisfaction with his work, so that he is positively involved, a characteristic of higher professionals.

The medical profession offers an extreme example of a trend for the members to look first to their professional peers for prestige and esteem, and not to other members of the organization that employs them for they are not considered knowledgeable enough about professional skills.

Control of doctors in hospitals is based to a great extent on a differentiation of rank, which also determines the allocation of power between medical students; residents and staff-members.

DEBUREAUCRATIZATION OF MEDICINE

Some observers like Ivan Illich and Irving Zola have proposed to deregulate the medical care altogether, because, according to them, not only does medicine have too much autonomy, but also that the deleterious effects of such autonomy and power are becoming more obvious. Illich describes three levels of iatrogenesis - harm done to the patient by the physician's ministrations. First, clinical iatrogenesis, or harm done by errors of judgement or treatment (malpractice). Second, social iatrogenesis, by maintaining the patient in the sick role, what Zola labels "medicalization of society". Third, structural iatrogenesis, in which health-professionals have structurally health denying effects insofar as they destroy the potential of people to deal with their human weaknesses in a personal and autonomous way. These consequences, said Illich, stem from the autonomous power of a medical bureaucracy that defines not only what is health, but how that state is to be achieved and maintained. He, thus, recommends to deregulate medical care altogether and to let individuals choose to handle their health the way they wish and to make health-care an individual rather than collective responsibility.

CONCLUSION

Before attempting to sum up this research, it might be appropriate to emphasize that it was intended to be but a preparatory exploration, paving the way to a further in-depth analysis of some particular facets of medical codes of ethics as well as the problems which have emerged during the past few years and which continue to surface with the everyday innovations in concepts and technology. It will have been noticed that, for simplification purposes, this study has focussed on the medical profession as such, considered in the strict sense of the term, i.e. at the exclusion of other health-related professions, as chiropractice, acupuncture, physiatry, homeopathy, nursing, social work ...etc.

Selectivity, which in no way, suggests elitism, is however useful to identify, among other things, the sociological function of medical codes of ethics. In fact, the very existence of the codes implies that there are two groups of people: those who are governed by them and those who are not, those who abide by them and those who do not. It follows that, "vis-à-vis" the codes, society is thus differentiated clearly into those who are "in" the medical profession and those who are "outside" it.

Codes of ethics obviously reflect idealistic and moral trends. They are concerned with the conduct of physicians toward their individual patients and towards society as a whole. In modern codes, they also include the duties of the patient towards his treating physician and of society towards the profession as a whole. The forms in which codes are expressed vary from advices to admonitions, prayers, oaths, precepts, manuscripts, informal and formal codes and principles.

The difference between the various codes is not merely one of form. There are variations in content. The Code of Hammourabi devotes eight of its eighty two paragraphs to the fees of the physician and to malpractice regulations. Absent in the Egyptian tradition where state bureaucracy prevails, the code literally survives in a minor form of malpractice control if one can so label penalizing the physician who does not prescribe what known physicians of the past had advised. In the Talmud and the Medieval Jewish writings, the status and the duties of the physician are stressed. There is no distinction or differentiation into specialities and the fees are not subject to regulations. No reference to abortion or euthanasia can be found and teaching is dealt with only in medieval writings. In the pagan version of the Hippocratic Oath, duties toward the teacher are strongly stressed, euthanasia abortion and surgery are forbidden, confidentiality and purity emphasized. Teaching of the medical art is restricted to the "extended family". The Christian version introduces a concept of universality in the access to the profession. Besides, abortifacents whether oral or vaginal, are forbidden, and euthanasia and suicide strongly condemned. The four Elizabethan versions introduce minor variations concerning the duties towards the teacher and euthanasia. They also include a recommendation of not prolonging the patient's illness. Medieval writings do not depart much from the previous oath. However, emphasis is put on a broad academic background of liberal arts education, as displayed in the Bamberg's manuscript. Frederick II laws regulate medical teaching and training as well as licencing and practice. The fees are strictly dealt with and an interdiction of entering into business relation with an apothecary clearly stated for the first time .

Modern codes are initiated by Thomas Percival's Code of Ethics. This introduces the concept of the "gentleman-physician" and the physician's image of himself, regulates the interprofessional relations, innovates in matters of environment, pollution and hygiene and stresses the duties and responsibilities of the physician in legal matters.

North-American codes preserved the spirit and even the words of Thomas Percival. But the latter's seventy two regulations are reduced in number. However, for the first time, the duties of the patients to their physicians as well as those of the public to the profession are added to the code. Since 1903, the term code is dropped and is replaced by principles. The new inclusions are the obligations to observe professional rules and to join medical organizations. Successive codes or principles are more and more simplified. New inclusions are the condemnation of secret division of fees and the forbidding of contract practices under conditions detrimental to the physician and to the dignity of the profession. The 1948 Geneva Declaration adds the interdiction of discrimination (racial, religious, political, etc.) and that of doing anything that would weaken the physical or mental resistance of the patient. The total interdiction of practising abortion is somewhat relaxed and "therapeutic abortion" may be performed if the conscience of the doctor and the national laws permit. The 1957 Principles of Medical Ethics are reduced to ten which, however, introduce a suggestion to the physicians to strive for better academic standards. Finally, the Nuremberg Code establishes a rigorous control of medical experimentation on human subjects and introduces strict prerequisites in this field.

Subsuming the elaboration of the various oaths or codes and their modification, various underlying sociological factors can be identified: religion, law, knowledge, socio-economic background, etc.

Religion has long been blended with medicine. In ancient times, evil spirits were thought to be the cause of disease, thus heightening the therapeutic role of priests-physicians. Often practised in the temples, medicine was imbued with the same rituals and traditions of behavior. Where religion is well-established, it palliates for the absence of medical codes. Such is the state of affairs in the ancient Egyptian and Judaic traditions. In the Hippocratic tradition, philosophy is substituted to religion and the ethics of physicians were identical to those of the philosophical school to which they professed allegiance. The Christian era of medicine has been, for its part, coloured by Christian principles. Charity replaced justice as a basis for these principles. The "universality concept" replaced the selective elitism of Hippocratic times concerning the access to the profession. The dogma that God created man at His image" strenghtens the condemnation of euthanasia and abortion. Suicide, which was not punished by pagan religions is strongly forbidden by Christianity. The injunction to preserve body-integrity results in forbidding of castration and dissection; all methods of birth-control are condemned. During the Renaissance, the revolt against religious scholasticism leads to a relaxation of the grip of the church on medical practice. Dissection of the human body is again allowed. In the 18th century England, protestant ethics advocated the study of nature for the glorification of God. Consequently, sciences and particularly, medicine were promoted. The widening of the scope of medicine favoured the

elaboration of the first code of modern times, Thomas Percival's code.

In the 19th century, religion questions the introduction of analgesia and anesthesia, the permissibility of removing healthy organs, and the emerging psychoanalysis. It strongly condemns the right to die. In North-America, separation of the Church and state relaxes the rules concerning abortion and movements for legalizing euthanasia repeatedly surface. To counter these influences, the Catholic Hospital Association is founded. It is the American equivalent of the French Medical Secretariat instituted by Jesuit fathers at an earlier date.

Next, laws can frequently be seen to subsume codes of ethics. Thus, the Code of Hammourabi deals with both the fees of the practitioner and malpractice. However, it applies only to surgeons, leaving the physicians' patients unprotected. Frederick II laws regulate the teaching, licencing and practice of medicine. They deal with the fees of the physician and forbid any kind of monetary association with apothecaries. In modern times, laws are concerned with such complex problems as deciding or defining the moment of death, the fallibility of the external tests of death, the decision of turning-off life-sustaining devices, the protection of the irretrievably unconscious patient. American law, being derived from the English law, is permeated with the Christian spirit and thus, in spite of the formal separation of the Church and the state, it resists the introduction of euthanasia. However, relaxation of the rules concerning abortion has been introduced in the 1948 Code. Experimentation on human subjects is strongly controlled by the Code of Nuremberg. Elementary human rights have further strengthened already existing concepts as confidentiality and body-integrity. The right to health is subsumed in the

establishment of national health services and the pollution control. The right to freedom underlies the commitment policy in psychiatry wards.

Knowledge, for its part, has had its share in shaping medical ethics. When evil spirits were believed to be the cause of disease, remedies were magico-religious. In ancient Egypt, scientific medicine, i.e. medicine based upon observation of facts, is well-established and both the Eber's and the Edwin Smith's papyruses display a large body of knowledge and an advanced technology. Knowledge of "masters of the past" is so valued that to depart from it is a form of malpractice. For Babylonians, disease is a punishment of Gods and treatment consists of incantations and exorcisms. Displeasing evil spirits with bitter medicinal herbs is the orthodox way adopted by physicians. Surgeons, for their part, do not enjoy the same prestige and are submitted to the malpractice regulations contained in the Code of Hammourabi. Judaic medicine did not contribute much to the knowledge of the time, and the high status of the physician is imparted to him by God himself. There is no reference to euthanasia, abortion, suicide or confidentiality in the Judaic tradition. Greek medicine was magico-religious in its pre-Hippocratic period. It became scientific in the Hippocratic times and this revolution is coupled with a philanthropic trend which gives rise to the Hippocratic Oath and principles. The importance of preserving medical knowledge underlies the selective elitism of medical teaching. The limitations of this knowledge also explain the avoidance and forbidding of surgery to physicians. In the Roman period, codification of knowledge results in the establishment of free medical teaching. Medieval times favour dogmatic religious scholasticism, prohibit dissection of the human body, deny free inquiry and confine acceptable knowledge to ancient texts approved by the Church. Disease is considered as a punishment for sin and seeking medical

aid is considered as showing a lack of faith in God. Ecclesiastical and royal powers are viewed as having a healing effect while surgery is forbidden because priest-physicians are not allowed to shed blood. The practice of medicine suffers a great setback. After teaching starts in the universities of Naples and Salerno, Frederick II laws are issued to regulate medical teaching and practice. In the Renaissance period, dissection of the human body being again permitted, discoveries in anatomy are made but the scholastic habit was still lingering and no change in the codes can be seen. The 17th and 18th centuries are a period of contrast. Observation and experiment replace dogma with resultant advances in medical science, but medical practice is still lagging. It is only at the start of the 19th century that modern codes emerge, and their subsequent modifications parallel the advent of germ theory and the long list of new discoveries. With the latter, new problems of ethics arise, especially in relation with euthanasia, anesthesia, psychoanalysis and biomedical research which culminates during the 20th century and obviates the need of the Nuremberg Code.

The status of the profession had pursued an up and down course through the ages and the prestige of physicians was directly proportional to their efficiency - real or suggested. Physicians differs as to their "auto-perception" and society cannot be said to have reached a consensus about practitioners and the medical profession. The latter is more and more ruled by the ideal of economists and political philosophies. Besides, the ever widening gap between scientific and folk medicines, the more liberal access to medical teaching, the increasing range of health-related occupations inevitably engendered complex conflicts and problems to both physicians and patients. Professionalization of medicine brought some solutions.

It protected physicians from interference by extra professionals and protected patients from incompetence or unscrupulousness of its members. It implies a large body of knowledge, a collectivity-orientation, a collegial organization, licensing and mandate powers, monopoly of control and various rewards. Its process requires among other steps, the construction of a code of ethics. However, in the future, and especially due to the union movements, a reversal of the present trend is expected. Deprofessionalization will deprive the profession of its monopoly over knowledge, public belief in its ethos, expectations of work autonomy and authority. The emergence of bureaucratic administration, with its exact division of labour and hierarchical distribution of authority now is viewed as an effective mode of organizing both people and material on a large scale, thus allowing people access to otherwise costly modern technology and physicians the possibility of offering it. This would, obviously, be at the expense of the traditional self-control, so valued by the profession. In this perspective, as well as in the less probable advent of total deregulation of medicine, codes of ethics are, unavoidably bound to sustain modifications. From what preceded, one cannot fail to realize that, underlying the elaboration and the subsequent modifications of the medical codes of ethics, sociological factors - religion, law, knowledge and socio-economic processes - can be easily elicited and clearly demonstrated.

BIBLIOGRAPHY

Ashley, Benedict M.

1978. Health Care Ethics: a Theological Analysis. St. Louis:
St. Louis Hospital Association.

Atkinson, John

1976. Doctor's Dilemma: A Discussion of Medical Ethics.
London: Epworth Press.

Augustine, Leroy George

1969. Come, Let Us Play God. New York: Harper and Row

Barber, B. and Lally J.

1972. Research on Human Subjects: Problems of Social Control in
Medical Experimentation. New York: Russel Sage Foundation.

Barns, J.W.B.

1966. "The Hippocratic Oath - an Early Text". British Medical
Journal, vol. 2. P. 567.

Barton, Richard Thomas

1965. "Sources of Medical Morals" J.A.M.A. 193. Pp. 133-138.

Bohle, Bruce

1979. Human Life: Controversies and Concerns. New York: H.W. Wilson.

Boisscu, Roger

1967. Histoire de la Médecine. Paris: Larousse. Pp. 17-49.

Burns, Chester Ray

1968. "Ethical Guidelines for Organ Transplantation". J.A.M.A., 205.
Pp. 341-342.

1974. "Comparative Ethics of the Medical World Outside the U.S.", Tex. Rep. Biol. Med., 32 (1). Pp. 181-182.
1977. Legacies in Ethics and Medicine. New York: Science History Publications.

Cahiers Laennec

1949. New Problems of Medical Ethics. Ed. Peter D. Flood.

Camp, John

1965. Magic Myth and Medicine. New York: Taplinger.

Carriage, Jean-Louis

1965. L'Exercice de la Médecine à Paris, à la Fin du XIX Siècle et au Début du XX Siècle. Paris: Plon.

Coe, Rodney M.

1978. Sociology of Medicine. New York: McGraw-Hill. Pp. 174-179

Curran, Charles

1973. Politics, Medicine and Christian Ethics: a Dialogue with Paul Ramsay. Philadelphia: Fortress Press.

Davis, Nathan Smith

1972. History of Medicine with the Medical Code of Ethics.
New York: W.M.B.

Denton, John

1978. Medical Sociology: Boston: Houghton - Muffin Co.

Dolan, John

- 1976: Changing Trends in Medical Codes of Ethics. New York: McGraw Hill.

Duffy, John

1976. The Healers: The Rise of the Medical Establishment.

New York: McGraw Hill.

Edelstein, Ludwig

1943. The Hippocratic Oath: Text Translation and Interpretation.

Baltimore: Johns Hopkins.

Engelhardt, H.T.

1977. Knowledge, Value and Belief. New York: Hastings Center.

Ezioni, Mordecai

1973. Medical Ethics: The Physician's Creed. Springfield: C.C.Thomas.

Ficara, Bernard J.

1951. Newer Ethical Problems in Medicine and Surgery. Westminster:

Newman Press.

Field, Mark

1967. Soviet Socialized Medicine. New York: Free Press.

Frazier, C.A.

1920. Is It Moral to Modify Man? Ed. Claude Frazier.

Freeman, H., Levines, Sol and Watson, W.

1979. Handbook of Medical Sociology. New Jersey: Hall-Prentice.

Friedson, Eliot

1970. Profession of Medicine. New York: Dodd Mead.

1978. "The Organization of the Medical Practice", in Rodney M. Coe's
Sociology of Medicine. New York: Mc Graw-Hill p. 180

1977. "The Daily Prayer of a Physician - Attributed to 'Moses Maimonides'"
in The Bulletin of Johns Hopkins Hospital. 28. Pp. 256-261.

Gallher, John F.

1975. "The ASA Code of Ethics on the Protection of Human Beings: Are
Students Human too?" The American Sociologist, Vol. 10, Pp. 113-117.

Hang, H.

1975. "Deprofessionalization of Medicine" in Rodney Coe's Sociology
of Medicine. New York: McGraw Hill.

Haring, Bernhard

1973. Medical Ethics. Ed. G.L. Jean. Notre Dame: Fides Publications.

Healey, Edwin

1956. Medical Ethics. Chicago: Loyola University Press.

Illich, Ivan

1975. "The Expropriation of Health" in Medical Nemesis. London:
Calder and Boyars.

Jacobovits, Immanuel

1967. Jewish Medical Ethics, a Comparative and Historical Study of
the Jewish Religions to Medicine and Medical Practice:
New York: Block Publications.

Jones, W.H.S.

1924. The Doctor's Oath: an Essay in the History of Medicine.
Cambridge University Press.

Kenny, John Paulinus

1952. Principles of Medical Ethics. Westminster: Newman Press

King, Lester Show

1958. The Medical World of the Eighteenth Century. Chicago: University of Chicago Press.

Kleinman, Arthur

1980. Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine and Psychiatry. Berkeley: University of California Press.

Kluge, Eike Henner W.

1975. The Practice of Death. New-Haven: Yale University Press.

Knowles, John

1978. "The Professionalization of Medicine", in Rodney M. Coe's Sociology of Medicine. New York: Mc Graw-Hill p. 174

Kudlein, Friedolf

1970. Medical Ethics and Popular Ethics in Greece and Rome. Clio Medica.

Leake, Chauncey D.

1927. Percival's Code: A Chapter in the Historical Development of Medical Ethics. Chicago: A.M.A.
1940. "Theories of Ethics and Medical Practice". J.A.M.A. 208. Pp. 842-847.

Lieberson, Stanley

1975. Ethnic Groups and the Practice of Medicine. New York: Oxford University Press.

Levey, Martin

1966. Medical Deontology in 9th Century Islam, Journal of the History of Medicine and Allied Sciences, 21. Pp. 358-373.

Levine, Maurice

1948. "The Hippocratic Oath in Modern Dress". Journal of the American Medical Colleges, 23. Pp. 317-323.

Mackinney, Loren, C.

1952. "Medical Ethics and Etiquette in the Middle Ages: The Persistence of Hippocratic Idealism", Bulletin of the History of Medicine, 26. Pp. 1-31.

Menon, I.A.

1970. "The Medical Students' Oath of Ancient India", Medical History, 14. Pp. 295-299.

Munter, Sussman

1968. "Hebrew Medical Ethics and the Oath of Asaph", J.A.M.A., 205. Pp. 912-913.
1971. "The Oath of the Soviet Physicians", J.A.M.A. Pp. 217-234.

Osler, William.

1927. "The Ethics of the Greek Physician" in Chester R. Burns' Legacies in Ethics and Medicine. New York: Science History Publications, p. 120.

Parsons, Talcott

1974. Medical Jurisprudence or a Code of Ethics and Institutes Adapted to the Professions of Physik and Surgery. Manchester.

Percival, Thomas

1927. Medical Ethics. Edited by C.D. Leake. Baltimore: Williams.

Ramsey, Paul

1970. The Patient as a Person: Exploration in Medical Ethics.

New-Haven: Yale University Press.

1978. Ethics at the Edge of Life: Medical and Legal Intersections.

New-Haven: Yale University Press.

Restak, Richard M.

1975. Premeditated Man: Bioethics and the Control of Future Life.

New York: Viking Press.

Rosner, Fred

1967. "The Physician's Prayer - attributed to Moses Maimonides",

Bulletin of the History of Medicine, 41. Pp. 440-454.

1977. Medicine in the Bible and in the Talmud: Selection from ³

Classical Jewish Sources. New York: Klan Publishing House.

Susser, M.W. and Watson, W.

1971. Sociology in Medicine. New York: Oxford University Press.

Veith, Iza

1957. Medical Ethics throughout the Ages. Chicago: Chicago University

Press.

Weber, Max

1946. "The Social Psychology of World Religions" in From Max Weber:

Essays in Sociology. New York: Oxford Press.

Wilensky, Howard

1975. "The Professionalization of Medicine" in Rodney M. Coe's
Sociology of Medicine. New York: Mc Graw-Hill, p. 183.