Introduction

It is now a firmly established belief that legal and ethical considerations are integral to medical practice in the planning for the care of the patient. With the advances in medical sciences and growing sophistication of the legal framework in modern society as well as increasing awareness of human rights and changing moral principles of the community at large, doctors and other healthcare workers alike are now frequently caught in difficult dilemmas in many aspects arising from daily practice. Examples are plenty such as the duty to respect informed consent, truth-telling, breach of confidentiality, disclosure of medical errors, rationing of scarce health resources, biomedical research, organ donation, etc. Besides, there is also growing anxiety both within the medical profession and in the community regarding increasing trends of complaints and lawsuits against doctors. From the bitter experience of many doctors who were engaged in complaint or lawsuits in the past, many of them had resulted from failing of their doctor-patient communication skill or inadequate ability to comprehend and resolve dilemmas in clinical settings.

Medical ethics has developed into a well based discipline which acts as a "bridge" between theoretical bioethics and the bedside.¹ The goal is "to improve the quality of patient care by identifying, analysing, and attempting to resolve the ethical problems that arise in practice".² In addition to our moral obligations, doctors are also bound by laws and official regulations which form the legal framework regulating medical practice. It is now a universal consensus that legal and ethical considerations are inherent and inseparable parts of good medical practice across the whole spectrum. The disciplines of law and ethics in medical practice overlap in many areas and yet each has its unique parameters and distinct focus.

Legal and Ethical Regulations of Medical Practice in History

In ancient Egypt, practice of medicine was subject to legal restrictions. The right to practise was restricted to members of a certain class, and all doctors had to learn and follow the percepts laid down by their predecessors. Obviously, this was to protect the public from quackery. Fees for the doctors were paid by the State. If unsatisfactory results followed a course of treatment that had departed from the orthodox, the doctor responsible would be liable to punishment, which could be very harsh. Similar legal restrictions on medical practice were also found in other early civilizations such as Babylon and India.³

Throughout the history of mankind, medical legislation has continuously evolved to regulate the practice of medicine. The fundamental objective is to safeguard the standards of the medical profession and to protect the public against unskilled vendors of medicine who would be as injurious to the community as other criminals. The Justinian Code of the Byzantine Empire in 529 AD is probably the earliest law code found to contain clauses to require educational standard and proof of competence of doctors by examinations. It also restricted the number of doctors in each town and penalties were imposed for malpractice. By 12th century, there were well established medical legislations in Italy, namely the edict of Roger II of Sicily in 1140 and Frederick II in 1224, to prescribe organized medical teaching, set courses, examinations and qualifications.³

In Hong Kong, laws on public health and medical practice, essentially an adoption of the English Acts, had been introduced from the early days. In 1884, the first Medical Registration Ordinance was enacted to regulate the practice of medicine in the territory. Nowadays, the Hong Kong Medical Council is established and empowered by law to perform the following major functions: (a) assessment of qualifications and maintenance of Register of Medical Practitioners, and registration is the only valid licence to practise medicine; (b) formulating guidelines on the ethical and professional standards; (c) investigation of complaints of professional misconduct; (d) supervision of medical education and training; and (e) assessment of fitness to practise where a doctor's health is of concern.⁴
the medical profession at that time. Indeed, the spirit of this 25-century old Oath was restated in the Declaration of Geneva by the World Medical Association in 1948. The Declaration is the basis of the modern version of the International Code of Medical Ethics, which was first formulated by the World Medical Association in 1949 with subsequent amendments by the World Medical Assembly in 1968 and 1983 in Sydney and Venice respectively.

Meaning of Law and Medical Ethics in a Nutshell

In its simplest context, law can be defined as enforced rules devised by the State to govern the behaviour of its members for the mutual benefits of all. Observance of the rules must be guaranteed by some kinds of sanction directed against the rule breakers. In addition to laws for the general public, doctors are bounded by certain specific rules stipulated in statutes as well as code of professional conduct laid down by the official regulating authority, namely the Medical Council, and administrative codes set by the institutions. Together, they form the legal framework regarding the practice of medicine, violation of which may lead to criminal or civil liability, or disciplinary actions.

In addition to legal obligations, there are also expectations of society for the doctors and the goal of the profession based on long established moral principles of self-evident value, which define the moral framework of medical practice. Medical ethics can be defined as a self-imposed code of conduct accepted voluntarily within the medical profession, the observance of which depends on one's conscience and moral values.

Law and medical ethics are both dynamic and are in a constant state of change with time due to changing circumstances and societal values. Thus, new legislation and court decisions give rise to changes of the law and new ethical issues emerge in response to challenges created by new technology, law or other influence. There is also wide difference in law from country to country because of factors regarding religion, culture, traditions, political systems and social standards.

Fundamental Principles in Medical Ethics

Medical ethics is an applied ethics which involves examining specific controversial issues such as abortion, breach of confidentiality, end-of-life care, rationing of scarce medical resources. The objective is to try to identify the issue concerned, analyze it with reasoned ideas and arguments and arrive at a viable and morally acceptable resolution for it. In the realm of medical practice, it is difficult to hold rules or principles that are absolute in view of the many variables that exist in the context of clinical cases as well as new issues that arise as a result of changing circumstances and belief. Nevertheless, over the years, there are certain fundamental principles that have won a general acceptance as guideposts in the moral analysis of ethical dilemmas in medicine. The fundamental principles that apply generally to medicine or health care at large are: (a) respect of patient's autonomy; (b) the principle of nonmaleficence, i.e., the duty to avoid harm or injury to patients; (c) the principle of beneficence, i.e., the duty to do good to your patients, relieve their pain and suffering and to save life if you can; and (d) the principle of justice and act fairly.

The values that encompass the four fundamental principles in medical ethics are self-evident. They are considered to be doctor's prima facie duties to the patients and society. It is necessary for a doctor to take all of them into account when they are applicable to the clinical case under consideration. Not infrequently, when two or more principles apply, they may be in conflict. For instance, the decision to operate on a case of acute appendicitis involves at least two competing prima facie duties on the part of the doctor. At one end, the doctor is obliged to provide the greatest benefit to the patient by performing an immediate appendectomy. At the other end, surgery and general anesthesia carry risks and the doctor is under the obligation to avoid causing harm to the patient. The resolution adopted must base on a balance between the demands of the competing principles by determining which carries more weight in the particular case. In the case of appendicitis, a generally accepted rational calculus holds that the patient is in far greater risk of harm from a ruptured appendix if the doctor do not act, than from the operation and anesthesia if the doctor proceed to surgery.

Law and Medicine

Broadly speaking, medical matters come into interaction with law in four aspects: (a) legislation and administrative regulations affecting medical practice; (b) court judgments on problematic or controversial ethical issues in medicine; (c) medical matters or personnel may become subjects of lawsuits when issues of medical malpractice or alleged medical negligence arise; and (d) use of medical matters as evidence in courts for other criminal or civil proceedings such as cases of homicide, rape, wounding, workman's compensation, insurance claims and the like.

The Interaction of Law and Ethics in Medical Practice

Despite their distinctive roles, law and medical ethics overlap in many areas. It is indeed difficult to dissociate the legal and ethical basis of the professional duties of doctors. For instance, both law and medical ethics address to issues of confidentiality, euthanasia, abortion, use of dangerous drugs, medical malpractice and the like.
Both law and medical ethics aim at safeguarding a good standard of medical practice within the community. The overriding consideration is to ensure the health and welfare of the general public.

It is fundamental that doctors should be law abiding or they may face civil/criminal consequences due to breach of the standards prescribed by legal requirements. On the other hand, an ethics percept that is not adopted into law may be a significant professional and moral guidance but it is generally not enforceable. Often, lawmakers (courts and legislature) do take into account the views of medical profession, which may include ethical principle, when crafting laws affecting medical practice. Thus, ethical standards can be incorporated in the legislation and become part of the legal standards.

At times, a doctor's prima facie ethical duty may clash with his legal obligation. A notable example that often occurs is when the duty of confidentiality has to be breached by a court order and refusal to disclosure amounts to contempt of court. It is true that law is the established social rules for conduct which, in most instance, incorporates ethical standards to which the society subscribe. However, there are also instances when laws may be bent to reach socially compelling results, which can deviate from what is ethical. An entire society can become morally corrupt. No doubt, the doctors in Nazi Germany and Japan who had participated in the most notorious human experimentation during the Second World War were ethically wrong and were convicted of war criminals in subsequent trials, although their behaviour were not legally wrong under their social standards at that time.

**Growing Attention to Legal and Ethical Issues in Medical Practice**

Attention to legal and ethical issues in medical practice is growing intense in recent years both within the medical profession and in all sectors of the society. The ethical issues raised by new medical advances and the rapidly changing public values have provoked much debates among medical professionals and in other disciplines including lawyers, philosophers, sociologists, theologians, mass media and the community at large. Large scale programmes such as the human genome project, end-of-life care, priority setting, rationing of medical resources, women's health have attracted profound research interest in their ethical, legal and social issues.

The propensity to litigate is also on the uprising trend in recent years. This is part and parcel of the general trend that people nowadays are more conscious of litigation in all areas of life, particularly in the light of the increased awareness of their legal and human rights as well as rules of law. During the past century or so, medicine has evolved more as a science than as a "mystical art". The media has also reduced the complex medical sciences to a level that will allow the general population to comprehend. Moreover, "consumerism" is now firmly established in medical practice and this has been promoted on a wide scale by patients' rights organizations as well as authorities through public education and introduction of "charters" and "performance pledges". In recent decades, there has also been a fall of the traditional paternalism in medical practice. Thus, the patients and their families are now more ready to speak up to protect their rights, to raise questions or doubts on the conduct and skill of their doctors. Furthermore, issues of infringement of patient's rights, malpractice and medical negligence are now attracting wide media coverage. This has undoubtedly served to alert the general public to such possibilities.

The increase in medical negligence claims and litigation on issues of malpractice in recent years is reflected both in the number of lawsuits and the tremendous sum of monetary value involved. There is now greater availability of lawyers as well as compensation claim agencies who are ready to assist the patients and their families to institute legal actions against their doctors. A greater proportion of the general population is now aware that the courts can and, on occasion, do provide substantial monetary compensation for personal injury. This has obviously enhanced the growing "compensation awareness" in the public mind. Even in a lawsuit that has not been successful in proving the defendant doctor's liability to the plaintiff's personal injury, it can still devastate the doctor's career because of the media coverage it receives. The new wave of class-action lawsuits against healthcare professionals and organizations in North America is particularly worrying. The assembling of a group of plaintiffs instead of a single plaintiff greatly expands the defendant's exposure to liability. Besides, it is also likely that the media attention on such a case will attract additional potential plaintiffs.

Another factor that has been suggested by some health care professionals is the depersonalization of the doctor-patient relationship. It is undoubtedly easier to sue a relatively anonymous defendant, such as a hospital consultant, than to sue a family doctor whom one has known for years, and this is even truer of hospital authorities.

**The Scope of Law and Ethics in Medical Practice**

The scope of law and ethics in medical practice is expanding all the time. Any attempt in listing out the core topics can neither be complete nor prescriptive. Some topics are of interest to doctors of all specialties whilst some topics are more important to particular specialties. The following list is based largely on the consensus statement of the teachers of medical ethics and law in
UK on a model for core curriculum in medical ethics and law within medical education:

1. Official regulations of medical practice
   (a) Statutes laid down by legislature
      e.g. Cap 161 Medical Registration Ordinance
           Cap 134 Dangerous Drugs Ordinance
           Cap 137 Antibiotics Ordinance
           Cap 138 Pharmacy and Poisons Ordinance
   (b) List of Misconduct in a Professional Respect issued by the Medical Council of Hong Kong.

2. Foundations of doctor-patient relationship
   (a) Doctor's obligation of fidelity – patients expect that doctors are trustworthy, knowledgeable and competent. Doctors are looked upon as trustees of patients' medical welfare, always acting in the interests of the patients. We owe a duty of not causing harm to our patients (the principle of nonmaleficence). We also have a duty to do good to our patients if we can (the principle of beneficence).
   (b) Respect of patient's rights, including the basic principle of human rights and their relations with moral and professional duties.
   (c) Respect of privacy and confidentiality – the doctor-patient relationship is essentially founded on trust and confidence. Doctors are expected to respect for patients' privacy and disclose patients' information only when justified. At times, there is often conflict of interest between individuals or between and individual and the public with regard to disclosure of patients' information. There is also legal requirement to protect privacy in the general sense (Cap 486 Personal Data (Privacy) Ordinance).
   (d) Respect of patients' autonomy - informed consent and refusal to treatment are basic patients' rights. There are several related issues regarding the determination of patients' capacity to share in decision-making (patients' competence), the principle of 'risk-benefit equation' to decide how much information to be given to patients (therapeutic privilege) and the concept of surrogate decision in cases of incompetent patients. Difficult dilemmas can arise when this is in conflict with other prima facie duties of the doctors such as the situation when emergency interventions are required in cases of incompetent patients.
   (e) The difficult patients, noncompliance, hostile patients and abuse of patients' rights.
   (f) Breach of duties leading to medical negligence or malpractice claims.

3. Death and related issues
   (a) The definition and diagnosis of death.
   (b) The persistent vegetative state – what is the meaning of human life: an organism or a person with body and mind? Is there a need for advancing the definition of life; from somatic death and brain stem death to neocortical death?
   (c) End-of-life care – whether life support decision is to prolong life or suffering? Difficult issues of medical futility, forgoing life-sustaining treatment, doctor-assisted suicide and euthanasia have immense ethical and legal implications. A fundamental question for doctors is whether "letting to die" is the same as euthanasia.
   (d) Legal and ethical issues in organ transplantation.
   (e) Death certification and disposal of dead bodies.
   (f) Coroner and medico-legal investigations of death.

4. Reproductive medicine and genetics
   (a) The management of infertility – the legal and ethical issues in artificial insemination and surrogate motherhood.
   (b) The control of fertility – sterilization and other forms of contraception.
   (c) The right of foetus – the legal and ethical issues in abortion and the question of "maternal-foetal conflict".
   (d) Prenatal screening and wrongful life, genetic counseling and eugenics.
   (e) Genetic therapy – whether it is to treat the abnormal or to improve the normal.
   (f) Cloning of human being – its legal and ethical considerations.

5. Biomedical human research and experimentation
   (a) The legal and ethical regulations.
   (b) Ethics committee consultations.
   (c) The discrepancy between developed and developing countries.

6. Special issues in psychiatry
   (a) Legal and ethical justification for detention and treatment without consent.
   (b) Informed consent in patients suffering from mental illness – the question of competence by the state of mind.
   (c) Conflicts of interests between the patients, families and the society.
   (d) Mental disorders and crime – mental disorders and liabilities of an individual and issues of compulsory treatment for offenders (especially in cases of sex offenders); the role of psychiatrist as an expert witness.

7. Special issues in paediatrics
   (a) Consent in minor.
   (b) Conflicts of interest between parental rights, the rights of the child and the duty of the paediatrician.
   (c) Legal and ethical issues in cases of child abuse.
   (d) The paediatrician's role in child protection.

8. Healthcare delivery and resource allocation
   (a) Dilemmas in deciding a fair distribution of scarce medical resources and the rights of individual patient to healthcare services.
   (b) Healthcare cost crisis: its political, social and economic implications.
   (c) The criteria for rationing healthcare resources and
the sustainability of the healthcare services – does rationing simply mean “cutting” or “trimming” healthcare budget? What is a fair healthcare policy? What is the direction of healthcare reform? (d) Ethical considerations in the business aspects of healthcare – economic constraints, models of remuneration, professional freedom. The issues related to Health Maintenance Organizations and other managed care providers.

(e) Responsibility of individuals for their own health.
(f) Global distributions of healthcare resources: a gross unevenness.

9. Quality assurance
(a) Continuity of care for patients.
(b) Communications between doctors and patients, doctors and doctors. The duty to consult when necessary.
(c) Peer review and clinical audits, continuous medical education.
(d) Truth-telling, disclosure of medical errors and incompetent colleagues.20, 21
(e) Healthcare complaints – what is a fair and user-friendly mechanism to receive and resolve complaints.

10. Use of medical matters as evidence in courts
(a) The medical witness – a doctor may be called to attend courts to give professional or expert evidence, or both. The objective of medical evidence is to assist the court in determining the truth and hence enabling justice to be done. A medical witness must have impartiality, reliability, clarity and relevancy. His duty is to give evidence on a scientific objective manner commensurating with his role as a doctor as well as his expertise.
(b) The issue of “hired gun”.
(c) Conflict between a doctor’s duties to his patient and his role as a medical witness.

Conclusion

In recent years, teaching of law and ethics in medical practice has emerged as a core curriculum in both undergraduate and postgraduate medical education in many developed countries such as the US, Canada, UK, Australia and New Zealand.22, 23 Research and discussion papers on clinical ethics and reports on medico-legal cases now constitute a significant contribution to the expansion of medical literature, which have enriched our knowledge in the areas with widening scopes.2 This is perhaps a major area that the medical education and training in Hong Kong need to catch up.

Doctors are now expected to have knowledge and understanding of the principles of medical ethics and the legal responsibilities of the medical profession. They should also have the ability to recognize complex legal and ethical issues arising from clinical practice and sound decision-making skills to resolve them.24 Often there is no single or universal answer to such issues. The views within the medical profession as well as the public change constantly with time and vary from one country to another. It is therefore prudent for doctors to keep themselves informed about the current views, and when in doubt, be ready to consult their peers, lawyers and ethicists.

References
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13. Cap 212 Offence Against Persons Ordinance, Law of Hong Kong.
14. Cap 278 Medical (Therapy, Education and Research) Ordinance, Law of Hong Kong.