Iatrogeny: Why Patients Come to Harm
SR Maharaj

ABSTRACT

Iatrogeny remains a constant challenge to all members of the health team who must be made aware from the onset of their roles and responsibility to their patients with particular reference to patients’ rights and well-being. Physicians, as the acknowledged leaders of the health team, have the greatest role in this respect; their training and involvement in supervising and monitoring members of their health teams must reflect an acknowledgement of this responsibility. The protection of the legacy associated with the medical profession for ethical behaviour and acting in the patient’s best interest remains a challenge which must be addressed in the face of changing societal dynamics where rights and responsibilities are in a constant state of evolution. Medical schools must be at the forefront of responding to these challenges and reflect this by constant review of their training programmes.

Keywords: Ethical practice, medical education, patient care

INTRODUCTION

Patients may suffer unintended negative consequences of treatment prescribed by their physicians as a result of medical errors including prescription drugs which may be inappropriate or contraindicated for a particular diagnosis (1). Iatrogenic illness refers to an undesired mental or physical condition produced in the patient by something the
physician has said, or due to an undesired effect of the treatment given by the physician (2).

Iatrogeny implies that such effect could have been avoided by proper and judicious care on the part of the physician. The development of anxiety neuroses through thoughtless and ill-considered remarks, development of drug habituation and the injudicious use of therapeutic measures are examples of disorders precipitated by (physician) iatrogeny (2).

Ethical Medical Procedure
The code of ethics which governs medical practice globally has as one of its main pillars, Beneficence, which exhorts the physician to act in the best interest of his/her patient. Beneficence and non-maleficence are opposite sides of the same coin, the latter meaning – literally – first, do no harm. Medical training stresses both the art and sciences of the practice of medicine and these are embodied in the acquisition of a source of knowledge base (cognition), together with psychomotor skills (competencies) – both aligned to the development of the appropriate “affect” to deliver professional care in the context of the doctor-patient relationship.

Professionalism develops in the realm of “personal and professional development” which enables historical perspectives as a basis for understanding why the practice of medicine holds a place of honour in society, by way of ethical behaviour, standards of care, communication skills and all aspects of the doctor-patient-relationship including patients’ expectations of their doctor.

Delivery of Healthcare: The potential for Iatrogeny
The basic elements of healthcare relate to an understanding of causation of an episode of ill-health, prevention of such episodes, early diagnosis and management – the latter take into account compliance/adherence with the prescribed interventions, the use of other members of the health team where appropriate to prevent recurrence and rehabilitative measures according to need.

In the era of paternalism, the doctor’s words and/or deeds were virtually law. Few if any questioned the doctor’s orders, “and where an undesired outcome (including death)” resulted, more often than not this was usually accepted as the wish of God. As more information became available to the general public about matters related to health, there was a gradual transition from paternalism to patient autonomy.

Patient Autonomy: This is the right of a patient to make decisions about their healthcare without the healthcare provider trying to influence the decision, though it allows for patient education. This principle which came to prominence in the 1960s – together with other rights issues – fails to be grounded in medicine’s moral philosophy, argues Alfred Tauber (3).

Tauber proposes that there is compatibility with the concept of patient autonomy and the physician’s beneficence to be responsible – when taken together will result in a more humane principle of medicine (3) and gives moral responsibility to one’s actions. Tauber’s proposal seeks to bring to the fore an alternative to possible conflict between the doctor’s role in providing information to the patient who then makes a decision in the knowledge of being quantitatively in charge of the facts, while not necessarily understanding the nuances and other qualitative aspects as they relate to a final decision.

IATROGENIC DEATHS
Studies have shown that iatrogenic deaths result in the main from unnecessary surgery, medication errors, hospital (nosocomial) acquired infections and adverse effects of medications (4).

* Unnecessary Surgery
This may be the consequence of
- unawareness of alternative treatment modalities related to failure by physicians to keep up-to-date with current literature which may highlight;
* adverse outcomes from particular procedures
* newer techniques to carry out the same procedure
* radically new procedures based on the development of new technologies/techniques which make surgery safer
* poor judgment by the surgeon in patient selection for particular procedures, and/or limitation(s) of surgical skills to offer “safer” procedures

Underpinning all of these reasons why iatrogeny can result from (unnecessary) surgery are beneficence/non-maleficence and patient autonomy. How well informed was the patient to consent to a procedure which may not have been in his/her best interest? Was the patient involved in the decision making process? Was the decision to have surgery based on the doctor’s convenience, eg elective Caesarean section?

In modern day healthcare delivery, adverse outcome from surgical procedure may be challenged in a court of law – as a rule rather than the exception.

* Medication errors
The national Coordinating Council for Medication Error Reporting and Prevention in the USA defines a medication error in part as “any preventable event – that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient or consumer.”

From the physician’s point of view such medication errors have resulted from (5):
- Incomplete patient information in cases where
  * a history of patient’s allergies was not enquired into
  * unawareness of concomitant use of other medications and/or co-existing illness
* poor handwriting which may lead to miscommunication of drug orders, confusion between drugs with similar names, misuse of zeros and decimal points, confusion of metric and other dosing units and inappropriate abbreviations

* Hospital Acquired Infections
Patients are known to suffer infections resulting from exposure to drug resistant and/or lethal hospital infections.
The most common strains of lethal bacteria found in hospital patients are (6):
- Methicillin resistant – *Staphylococcus aureus*
- *Pseudomonas aeruginosa*
- *Klebsiella pneumoniae*
- Vancomycin – resistant – *Enterococcus faecium*; patients with compromised immune systems are particularly susceptible to infections
- *Clostridium difficile* usually gives rise to severe diarrhoea

* Medical Malpractice
This is yet another instance from which injury (or worse) may occur. Medical “mistakes” may be directly related to actual practice, eg vaginal or instrument assisted delivery, resulting in injury to mother and/or baby; intra-operative injury to the ureters during pelvic surgery.
Malpractice refers to negligence or misconduct by failing to meet a recognized standard of care or standard of conduct which leads to death or injury because of an error.
In many instances, one has to measure the level of training, skills and competence of a physician to under-take a particular procedure which carries known risks. In a training institution, a young inexperienced physician would have cases (appropriate to skill) selected by his consultant who provides supervision, as skills develop consistent with independent practice. Undoubtedly, errors occur in this setting, however, early recognition and corrective measures ensure that damage/injury is minimized or prevented. Independent practice (consultant level) will encounter surgical challenges which may be met with varying degrees of success. How far will one involve “human error”, that is, within standard error for that person at that level of competence and for the accepted degree of difficulty which is inherent in the particular procedure? These, latter questions may have to be answered by a jury of one’s peers and in a court of law.

**DISCUSSION**
Iatrogencity provides a forum to examine several important elements of training and monitoring of healthcare professionals to practice in a competent and caring manner. Patients may suffer undesired mental or physical conditions through injudicious, thoughtless or ambiguous remarks, or unethical, careless/negligent actions by attending physicians. This is particularly so for physicians who interact with patients at every point in the healthcare delivery continuum.
Medical education has undergone a paradigm shift and is wholly patient-centred in its focus. This is reflected by curricular reorientation to give prominence to modules such as “personal and professional development” as part of an introductory course to medical practice which is offered in the first-year of medical training at The University of the West Indies at Mona in Jamaica.

At the centre of this paradigm are several aspects of the doctor-patient relationship which include, inter-alia, (7):
- Ethics of medical practice: standards of care and the law
- Patients expectations of their doctors
- The team approach to the practice of medicine
- Communication skills, patient education and counselling, and introduction to conducting a medical interview.

While the practice of medicine is grounded in a philosophy of life and healthy living, it is important to remember that it is the patient who is the focus for all aspects of the application of this knowledge.

At The University of the West Indies, medical training aims to inculcate at an early stage the attitudes and behaviours appropriate to the practice of medicine and to address in no small measure illnesses/disorders, injury, mental distress, unintended outcomes of the physician’s intervention as a consequence of iatrogeny.

The trust and confidence reposed in physicians by the wider society demands that the time-honoured ethical pillars on which the practice of medicine have been established and maintained be kept at the centre of medical training, and that new graduates become cognizant of the responsibility they have to protect this legacy. The spectre of malpractice suits remains another reminder of the consequences of “negligence” which include sanctions of varying severity to the ultimate of being permanently removed from the medical register or a prison sentence in more extreme cases. Iatrogeny can never be completely avoided, but there are many areas where significant improvements can be achieved by greater knowledge of what iatrogeny is all about, and more attention to detail in the consultation process and the implementation of management regime, up to and including, strategies for compliance/adherence and involvement of other members of the health team whose training, supervision and monitoring must be supported and contributed to by physicians in their capacity as teachers and protectors of their patients rights and well-being.

Iatrogeny requires constant vigilance by all stakeholders, at all levels of healthcare delivery and the empowerment of patients to act in their own best health interest.
REFERENCES
5. Medication Errors, FDA US Food and Drug Administration http://www.fda.gov/Drugs/DrugSafety/MedicationErrors/default.htm (accessed on 04.03.10)
6. Hospital Infections – Drugs Resistant Bacteria http://www/your/lawyer.com/topics/overview/hospital_infections
7. Student Course and Study Guide: Medical Undergraduate Programme, The University of the West Indies, Faculty of Medical Sciences, Mona, 2008.