INTRODUCTION
The term iatrogenic Nocere originates from the two domains.

1. Iatrogenic from pharmacology.
2. Nocere from the Hippocratic injunction – Primum non nocere; Nocere meaning “harm”.

‘Iatros’ means physician in Greek, and ‘genic’, meaning induced by, is derived from the International Scientific Vocabulary. Combined, of course, they become iatrogenic, meaning physician-induced. Thus iatrogenic disease is ‘a disease which is caused by a physician’.

The growing complexity of modern medicine has promoted the elasticity of language. In common usage, then, iatrogenic disease is now applied to any adverse effect associated with any medical practitioner or treatment. The practitioner need not be a physician, he might be a nurse or a radiology technician, or any one of the scores of differentiated healthcare workers encountered in hospitals, clinics, nursing homes, or offices, or for that matter in the ambulance on the way to one of those places.

The Hippocratic injunction to do no harm has been an axiom central to clinical pharmacology and to the education of medical and graduate students. With the recent re-examination of the nature and magnitude of adverse reactions to drugs, its applicability and limitations as a guide to the ethical practice of medicine and pharmacological research are of paramount importance. It remains a potent reminder that every medical and pharmacological decision carries the potential for harm.

The Zhan and Miller study supported the Institute of Medicine’s (IOM) conclusion, which found that medical errors caused up to 98,000 deaths annually and should be considered a national epidemic.

The issue of potential harm is associated with every pharmacological decision. The ethical pharmacological practice requires an informed consent of the patient and depends highly on the doctor patient relationship. It enables the patient to make his own decision among the treatment options. The treatment options are required to be discussed by the doctor with the patient in detail, aiming at the risks and benefits associated with the various options.

DISCUSSION
The three pillars of ethics are confidentiality, autonomy and equity. When autonomy of patient is compromised, the probability of iatrogenic Nocere increases. Iatrogenic Nocere comprises of a triad of doctor, patient and the drug. The doctor’s practice is guided by the Hippocratic Oath, the patient is vulnerable and drugs are marketed through the pharmaceutical industry. It is the exploitation of the vulnerable patient by the doctor who has forgotten his Hippocratic Oath and forms an unethical nexus with the pharmaceutical industry.

Iatrogenic Nocere dwells in the concept of informed consent. Informed consent emphasizes a patient’s understanding of the information about the proposed treatment, potential risks and benefits of treatment, and the consequences of not taking the treatment. It also requires a patient to have the capacity to make a choice.

Informed consent is built upon the elements of information, decisional capacity, and voluntarism.
Information in the consent process generally encompasses issues such as the nature of the illness, the anticipated risks and benefits of the proposed procedure, and possible alternatives, including non-intervention. Decisional capacity, in turn, comprises the ability to communicate, understand, and logically work with information and to appreciate the meaning of a decision within the context of one’s life. Understanding of voluntarism is more intuitive and involves philosophical ideals of freedom, independence, personhood, and separateness.

Informed consent becomes a dilemma in case of a patient with compromised judgment and lack of insight. It is commonly encountered in psychiatric clinical practice. For an informed consent to be valid in case of a mental disorder, the following are given consideration:

i) a mental disorder should not prevent a patient from understanding what s/he consents to;
ii) a mental disorder should not prevent a patient from choosing decisively for/against the intervention;
iii) a mental disorder should not prevent a patient from communicating his/her consent (presuming that at least reasonable steps have been taken to understand the patient’s communication if present at all), and
iv) a mental disorder should not prevent a patient from accepting the need for a medical intervention.

Now we relate the code of ethics of Pakistan Medical and Dental Council (10) to the concept of iatrogenic Nocere:

11.2.5 The RMDP (registered medical or dental practitioner) shall additionally:

- identify themselves to patients whom they are treating
- treat all patients with dignity and respect,
- listen to patients and respect their views,
- give patients (and provided patient agrees, family members) information (about their illness) in a way that they can understand,
- respect the rights of patients to be involved fully in decisions about their care,
- ensure that conflict of interest does not prevent them from performing their professional work in an unbiased manner,
- adhere to veracity (truth telling) as judged in the patient’s interest.

11.2.6 Details of Information

Patients do not always fully understand the information and advice given to them by doctors. They should be encouraged to ask questions. These should be answered carefully in non-technical terms if necessary with or without information leaflets. The aim is to promote understanding and to encourage compliance with recommended therapy. The doctor should keep a note of such explanation and it is felt that the patient still does not understand, it may be advisable to ask the patients permission to speak to a relative.

11.3.8 Restrict prescription of drugs, appliances or treatments to only those that are beneficial to the patient.

11.3.9 Treatment without direct patient contact

Prescribing of medications by practitioners requires that the physician should demonstrate that a documented history and physical examination and drug reaction history are available; that there has been a sufficient dialogue between the patient and the doctor on options in management, and a review of the course of the illness and side effects of the drug.

Iatrogenic nocere poses an ethical dilemma in the professional life of every doctor but unfortunately the culture of “reporting errors” does not exist in Pakistan. We can see various forms of iatrogenic nocere:

- Depressive episode following interferon therapy
- Stroke following valvular heart replacement
- Paraplegia following spinal surgery
- Glaucoma following infection of intra ocular lens after cataract surgery
- Tuberculosis in iatrogenically immuno-compromised patients

A review of published discourse on ethics in Pakistan
reveals several general trends. The Pakistani milieu offers challenges to this process because crucial decision making is often done by family members or is left entirely up to the attending physician. This also raises certain ethical dilemmas for physicians who may feel uncomfortable with communication which excludes the patient or in accepting a paternalistic primary decision making role. Further complicating the issue is the fact that there is inequitable distribution of health resources between urban and rural population.\textsuperscript{10,11}

**CONCLUSIONS**

Iatrogenic Nocere has got ethical dimensions for doctors in every discipline because of the complex interplay of the principle of ethics and form an extremely important facet of public health in all parts of the world, especially today, with the emergence of side effects with newer drugs. A richer discussion in both real settings and scientific literature is needed. This will result in a frequent and constructive dialogue with greater understanding of ethical issues within regional and national contexts. Such a process may eventually lead to the development of better working solutions and methods, which will be beneficial to both healthcare providers and their patients. It will also stimulate consideration of ethics in the fields of health policy development, biomedical research and human resource development for health, and investments for health development, especially in the developing world.

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**REFERENCES**

1. The Health Grades study, JAMA October 2003.
10. The Pakistan Medical and Dental Council; Code of Ethics 2001.