

## Real-life ethical dilemmas: A case study approach to engage the medical and biomedical students towards bio/medical ethics

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Ethics and ethical behaviour form important part in clinical science and biomedical research. Whilst patient safety, confidentiality and privacy take precedence in clinical medicine; ethically warranted study design, methodologies and data handling is vital for biomedical research. In fact, ethics in medical research deals with the conflicts of interest across various levels. Many treaties and declarations are in place to enforce ethical behaviours, especially in medical research (Gurayaa et al, 2014). As clinicians and researchers have the obligation to follow the ethical principles in their practice, it is imperative to educate young medical students on different dimensions of ethics in medical practice, such as research ethics, and the seriousness of misconducts. It is also essential to teach young scientists about good laboratory and scholarly practice in research (Masic, 2012). Also, more young doctors are getting involved in basic research and scholarly activities outside their usual territory of “clinical/patient based medicine” involving in vitro/animal research, and data handling. Likewise, several basic scientists are carrying out in vivo medical research involving patients.

At the beginning of this decade, the World Medical Association’s (WMA, 2015) including ethical education as an obligatory curriculum within medical education. Whilst there is a greater emphasis of incorporating ethical education to medical students, it is not clear whether the research scientists are being taught about ethics, ethical behaviour and the consequences on intentional or un-intentional misconducts. On other hand, with the advent of genetic engineering, stem cell therapy, and genomic manipulations, the medical profession itself is facing new ethical challenges. Therefore, teaching bioethics to students with multi-disciplinary focus is imperative. Especially the fact that, the ethical decisions are subject to the situation, local legislations, and may be incorrectly influenced by moral justifications (Safuan et al, 2017). Young scientist/doctors are expected to critically analyse the situation with proper reasoning according to each ethical problems/situations. They need to develop critical thinking based on the information provided, as they become accountable for their own decisions.

Therefore, bioethics should be comprehensively taught, with the aim to help graduate/ undergraduate students to practice by applying underlying principles. Many medical schools and other institutions use traditional lecture based delivery on ethical principles. Whilst it is important for young clinicians/scientists to learn the basic ethical principles, these lecture based delivery is often seen as “boring” and “dry”, which is not always linked to day-to-

day practice. Also, the teaching curriculum in many universities are fully “saturated” with course specific contents which often makes it difficult to incorporate ethical education into their delivery. Hence some institution run extra sessions to deliver bio/medical ethics (Weatherall, 1995). In fact, it has never been clear how to deliver sessions on ethics and ethical conduct. Therefore, more innovative types of learning strategies are being employed to deliver these sessions. One such method, a “case study based delivery” was employed by the author in his institution. In this method, students were presented with a variety of case studies highlighting the issues in biotechnology, clinical medicine, food technology, biomedical science etc. Students were then grouped into two panels to discuss/debate (for and against) each scenarios. Finally the underlying principles were discussed in a plenary session. Although this approach was found to be time consuming (3 hour sessions as opposed to one hour lecture slots), it has generated full attention and engagement amongst the students.

This workshop would highlight the importance of this type of activity to enhance student understanding of the importance of ethics in biomedicine. The session is suited for students/ graduates undertaking medical and/or biomedical career options. Similar workshops have been conducted in previous conferences in Europe. Author wishes to take this conference as an opportunity to deliver this session to medical and biomedical students in UAE.

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