

**CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

Autumn Examinations 2011/12

Module Title: Professional Ethics and Risk Management
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Module Code: EDUC8003

School: Science & Informatics

Programme Title: BSc (Honours) in Herbal Science – Award

Programme Code: SHERB_8_Y4

External Examiner(s): Dr J. Green

Internal Examiner(s): Ms A.M. Keaveney
Mr E. Fitzgerald

Instructions: Answer one question from section A, one question from section B and one question from section C.

Duration: 2 hours

Sitting: Autumn 2012

Requirements for this examination:

<p>Note to Candidates: Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper. If in doubt please contact an Invigilator.</p>
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Section A (30 marks)

1. 'Bioethical principles are considered to be an essential part of conventional medicine, as they guide clinicians' interactions with patients such that patients' interests are of primary importance. As the use of herbal medicines, becomes increasingly popular in the Western world, it is becoming more and more apparent that these same bioethical principles are applicable to these alternate forms of health care....' Taken from an article entitled *Ethics of Using Herbal Medicine as Primary or Adjunct Treatment and Issues of Drug-Herb Interaction*

In light of this statement critically discuss the ethical issues you consider most relevant to the practice of herbal medicine.

2. You have been treating a patient for cholesterol for over a year using preparatory capsules of three herbs one of which is red yeast rice. The patient has responded extremely well and cholesterol levels have reduced appropriately. You have recently received information from the company who manufacture the capsules that the manufacturing process for the red yeast rice has changed and the new process appears to significantly increase the levels of monacolin K* in the final product.

*Chemical analysis has shown that lovastatin (Statin drug used to treat cholesterol) and monacolin K are identical. Different manufacturing processes can produce different levels of monacolin k in the final product with some processes producing levels of monacolin k equal to the amount of lovastatin found in the drug.

Critically debate the ethical issues in using this new product for your patient.

Section B (30 marks)

3. China, India, Nigeria, the United States of America (USA) and WHO have all made substantial research investments in traditional herbal medicines. Industry has also invested millions of US dollars looking for promising medicinal herbs and novel chemical compounds. This is still a relatively modest investment compared to the overall pharmaceutical industry; however, it raises interesting ethical questions, some of which are not faced in more conventional drug development.

In light of the above statement critically discuss two ethical issues you consider might **not** be faced in more conventional drug development and two ethical issues you consider **might** similarly be faced with more conventional research.

4. You have been contacted by a company who is engaged in research on an herbal product for diabetes and would like you to take part in a clinical trial using their product. Upon review you consider that the herbal product is indeed well formulated, containing herbs that are familiar to you and your practice and could be advantageous to certain of your patients. Nevertheless there are issues with certain of the herbs in terms of your experience and the literature. You have concerns about one of the herbs because one or two of your patients developed a rash while taking this herb although there were other potential complicating factors and recent reports from in vitro studies have raised concerns about another of the herbs in the formulation. There are no systemic side-effects reported for humans (for any of the herbs) in the literature. A few small controlled and RCT trials have shown mixed results in relation to two of the herbs but within other formulations not within this specific formulation.

Critically discuss the ethical considerations you would need to consider in relation to this case.

Section C (40 marks)

5. Discuss the requirements on professional healthcare practitioners to be aware of the need to behave ethically and to observe a moral code even if their consciences would allow them to do otherwise.
6. Discuss the challenges faced by a professional body attempting to deliver a uniform standard of care and behaviour by its diverse membership of complementary healthcare practitioners.