POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO
SELECTION EXAMINATION FOR POSTGRADUATE CERTIFICATE IN
MEDICAL EDUCATION – JANUARY 2018

Date: 15 January 2018   **Time:** 0930 – 1030 hours

Answer **any two (02)** out of the three questions
Answer each question in a separate book

QUESTION 1

Read the following abstract and answer the questions.

Effects of a case-based interactive e-learning course on knowledge and attitudes about patient safety: a quasi-experimental study with third-year medical students
Rainer Gaupp, Mirjam Körner and Götz Fabry

Background: Patient safety (PS) is influenced by a set of factors on various levels of the healthcare system. Therefore, a systems-level approach and systems thinking is required to understand and improve PS. The use of e-learning may help to develop a systems thinking approach in medical students, as case studies featuring audiovisual media can be used to visualize systemic relationships in organizations. The goal of this quasi-experimental study was to determine if an e-learning can be utilized to improve systems thinking, knowledge, and attitudes towards PS.

Methods: A quasi-experimental, longitudinal within- subjects design was employed. Participants were 321 third-year medical students who received online surveys before and after they participated in an e-learning course on PS. Primary outcome measures where levels of systems thinking and attitudes towards PS. Secondary outcome measures were the improvement of PS specific knowledge through the e-learning course.

Results: Levels of systems thinking showed significant improvement (58.72 vs. 61.27; $p < .001$) after the e-learning. Student's attitudes towards patient safety improved in several dimensions: After the course, students rated the influence of fatigue on safety higher (6.23 vs. 6.42, $p < .01$), considered patient empowerment more important (5.16 vs. 5.93, $p < .001$) and realized more often that human error is inevitable (5.75 vs. 5.97, $p < .05$). Knowledge on PS improved from 36.27 % correct answers before to 76.45 % after the e-learning ($p < .001$).

Conclusions: Our results suggest that e-learning can be used to teach PS. Attitudes towards PS improved on several dimensions. Furthermore, we were able to demonstrate that a specifically designed e-learning program can foster the development of conceptual frameworks such as systems thinking, which facilitates the understanding of complex socio-technical systems within healthcare organisations.

1.1. List two (02) domains of learning studied in this research.　　　　(10 marks)

1.2. Justify the use of pre and post tests in this study.　　　　·　　　　(30 marks)

1.3. Explain the term 'quasi-experimental study design' using the above study as an example.　　　　(40 marks)

1.4. List the dimensions of patient safety which have been improved after the e-learning course experimented in the study above.　　　　(20 marks)

QUESTION 2

THE CLINICAL TEACHER

Peer Learning and Teaching
Near-peer teaching programme for medical students
Authors
Zoe Gottlieb,Samantha Epstein and Jeremy Richards

Ethical approval: The study was submitted to the Harvard Medical School Institutional Review Board and deemed exempt from formal review. Verbal consent for participation was obtained from the second-year students, the fourth-year students and faculty members. We specifically informed participants that there was no obligation to participate in this study and that choosing not to participate would not result in any negative consequences. Furthermore, participants were informed that all data would be maintained in a confidential and secure manner, and that data with potentially identifiable information (such as the fourth-year students' reflective writings) would be de-identified for the purpose of analysis.

2.1. List two (02) indexed journals (other than Clinical Teacher) in medical education.
(20 marks)

2.2. List three (03) databases where you would search for the literature in medical education. (15 marks)

2.3. List two (02) referencing styles commonly used in scientific literature. (20 marks)

2.4. Make a full reference of the above article using one of the referencing styles you listed above. (30 marks)

2.5. List three (03) steps taken by the authors to address the ethical aspects of this study. (15 marks)

QUESTION 3

You have been given the responsibility of planning a half day CPD (Continuous Professional Development) workshop related to your discipline for medical officers in a Base Hospital.

3.1. Briefly describe why CPD is important for medical officers.   (30 marks)

3.2. Formulate three (03) learning objectives you would expect participants to achieve at the end of this workshop.   (30 marks)

3.3. Outline the steps you would take to ensure participant interaction and engagement in this workshop.   (40 marks)