

Title: Concurrent teaching of reproductive science by three disciplines

Author: Yinusa Raji, Ph.D.

Context and setting: The Medical School University of Ibadan, established in 1948 is the first training institution for health care professionals and faculty capacity building for other medical schools in Nigeria.

Why the change was necessary: Anatomy, Physiology and Biochemistry are pre-clinical disciplines that have been taught individually using a didactic model irrespective of similarity and overlap in content since the school's inception. The result is unnecessary repetition, encouragement of rote learning, waste of time and inability of students to integrate and apply knowledge during and after clinical training. The aim of this project is to introduce concurrent teaching of anatomy, biochemistry and physiology in reproductive science using clinical examples during pre-clinical training. This is a preliminary step towards full integration of the three disciplines with inclusion of clinical examples.

What was done: A core group of faculty, nominated by chairs of the departments of anatomy, biochemistry, physiology, chemical pathology and obstetrics and gynecology and student representatives formed the study team. Small and large group discussions were held amongst faculty and students to seek their support for concurrent teaching of reproductive science and introduction of clinical examples. Past examinations results in reproductive system in physiology (only physiology has a separate assessment in reproductive system) were reviewed. A Likert questionnaire was designed to elicit student perceptions of clinical integration in the curriculum. A separate questionnaire was designed to elicit clinical faculty perceptions of the preparation of students in the reproductive sciences. As a result of student responses to the questionnaire, clinical examples were introduced in preclinical teaching. A third questionnaire was administered to determine if student acceptance of the integration of clinical examples in preclinical subjects had changed. In addition, focus groups were held with key stakeholders. These stakeholders included the dean, department chairs, preclinical and clinical faculty, students, and patients.

Evaluation of the results and impact: Approximately 80% of the students responded to the first questionnaire and 70% of faculty responded to the faculty questionnaire. Seventy five per cent of faculty supported concurrent teaching of reproductive science with inclusion of clinical examples. They also made significant contributions to course content and clinical examples developed. Similarly about 88% of students picked concurrent teaching as their preferred teaching method appropriate to their understanding of the subjects. About 76% of them agreed or strongly agreed that concurrent teaching will enhance their understanding of the subject. Almost 81% of the students agreed or strongly agreed that introduction of clinical examples in reproductive science will improve their understanding and application of the subject. Acceptance of clinical examples in reproductive science was overwhelming (98.8%). When asked to suggest other desirable teaching methods, majority (91%) suggested the use of multimedia

projector and interactive teaching of small groups of students. The results underscored the need for introduction of concurrent teaching of anatomy, biochemistry and physiology in reproductive science and introduction of clinical examples. The ultimate goal is to repeat this study in the clinical disciplines to achieve a full integration of the curriculum.

Acknowledgements: The supports of the Foundation for Advancement of International Medical Education and Research (FAIMER), Philadelphia, PA, USA, the University of Ibadan, Nigeria, Professor Adeyombo F. Bolarinwa, University of Ibadan, Nigeria and Professor Ara Tekian, University of Illinois at Chicago USA, are gratefully acknowledged.

Correspondence: Y. Raji, PhD: Department of Physiology, College of Medicine, University of Ibadan, Ibadan, NIGERIA, Mobile: +2348023263626, Email: yinusaraji@gmail.com