

Principles of Adult Learning

The Gorgas Course Perspective

Underlying Philosophy: Learn tropical medicine in the tropics.

In order to provide the most effective learning environment for its participants, the Gorgas Course is based on recognized principles of adult learning including the following:

Adults returning to a structured learning environment after a period of work since their last higher degree was obtained, learn more effectively when

- A) The information is practical and relevant to their work
- B) They are in charge of their own learning
- C) They are actively, rather than passively, involved in the learning.

Practical and Relevant Content

1) The Gorgas Course is case-oriented. Data from previous Gorgas graduates tells us that the key reason participants have taken time from their lives to come to Peru is to see and work first hand with the very rich and unique patient population at the Tropical Medicine Institute. This feature distinguishes the Gorgas Course from other tropical medicine Diploma Courses. The emphasis of this course is on clinical bedside teaching, case conferences, and small group discussions of patient management. This clinical teaching model is equivalent to that utilized for training sub-specialty fellows in infectious diseases in the USA and Peru. Gorgas physicians, like fellows, are physicians already possessing primary skills in patient care and management who, under the supervision of experienced attending physician learn primarily by studying around patients they see.

2) Didactic lectures and laboratory practical sessions are included to provide a factual foundation for good patient care and to support the participants' ability to learn around the patients seen in the hospital and clinics. These didactic sessions also allow us to meet criteria for accreditation by various external examining bodies. Basic science and discoveries that have yet to move from bench to bedside are not in the curriculum.

Adult Students Must be in Charge of their Own Learning

Each participant will need to define an individual program of work which best meets the course objectives as well as the participant's own personal objectives. The responsibility for defining this individualized program of work lies with the participant. In order to do this participants must first have a clear vision of their own objectives and a clear understanding of their own learning styles. Faculty is, of course, always available as advisors in this process.

While the Gorgas Course is a structured Diploma Course, different teaching formats are utilized which are complementary, not mutually exclusive. These include daily ward rounds, didactic lectures, interactive case conferences, laboratory practical sessions, and roundtable discussions by experts. This acknowledges that some individuals learn better aurally, some visually, and some experientially. Not every disease or syndrome will be covered independently in each teaching format. For example, some less common conditions might not be covered at all in any formal lecture but will be covered in a case conference or a lunchtime discussion session. Another example of this concept is tuberculosis, which will be seen, discussed, and taught

repeatedly on clinical rounds, but is scheduled for only 3 formal didactic sessions. Thus, not every aspect of TB that is necessary for good patient care will be covered in lecture sessions. This is important to comprehend when preparing a study plan.

Active Learning

Course participants are expected to remain active in optimizing their own learning experience and updating their own learning plan as the course progresses. Clinical rounds and case conferences which make up a large part of the course require active participation on a daily basis. Thus, it is clearly important for participants to take the initiative in discussing cases in sufficient detail on clinical rounds to answer all questions that they may have. The faculty has tremendous experience but may not always know what it is that individual participants don't know. Knowledge gained by seeing and/or discussing cases needs to be consolidated by reading around those experiences within a short time frame thereafter. In addition to the 380 formal hours of teaching, course participants have exclusive use of the Learning Resource Center during the course. Use of this facility requires active independent effort by each participant. A comprehensive collection of reference texts, videos, and software tools, allows participants to adapt their learning of the subject material presented in the formal part of the course to their own personal context and goals.

Important things to remember:

Cross-Cultural Sensitivity: By offering the course in a developing country where course participants have broad access to these unique patient populations, individuals are exposed to different cultural and environmental contexts. This impacts on daily interactions with faculty, with fellow participants, and with the patients. This is an international course with an international faculty and participants. Teaching styles differ across the world and do not all conform to those utilized in US/European undergraduate medical schools. The primary teaching model is case-oriented study and not book or lecture note oriented regurgitation of facts. A clinician who imparts the personal experience of a thousand cases of a particular tropical disease in a non-standard format can be more effective as the professor with only book knowledge.

Sensitivity to the Needs of Other Participants: Gorgas Course participants have widely differing backgrounds and priorities. There are primary care physicians, public health professionals, infectious disease specialists, other specialists, and non-MD medical providers. The varying goals of participants include a desire to enhance skills in order to work in developing countries, in order to work in the developed world treating travelers to and from developing countries, in order to be more effective teachers in their own countries, or in the case of laboratory scientists to be able to enhance the relevance of their research work. In designing the teaching formats and preparing lectures, a balance between the differing needs of our participants has been kept in mind.

Intensity of the Curriculum: The Gorgas Course is intensive and much material is covered. The course was condensed into 2 months to meet the needs of the great majority of participants who could not get the time off for a longer course. It is easy to fall behind. Reading around the patients as they are seen and studying other material as it is presented is vital in order to be able to pass the final examination or to benefit properly from a course, which for most, represents a heavy investment in terms of both time and money.

Guidelines for Clinical rounds:

- 1) Rounds should start on time and not finish until the allotted 2.25 hours is up.
- 2) The patient history should be presented in enough detail for the course participants to be able to complete all applicable sections in their patient log-book.
- 3) For patients with physical findings, enough time should be allowed for each course participant to examine the patient for as long as the participant wants.
- 4) A differential diagnosis should be discussed and all factors favoring or ruling out a particular diagnosis should be clearly delineated.
- 5) Diagnostic procedures should be discussed in the context of what has been done and what could be done.
- 6) All possible therapeutic options should be discussed, including differences between developing and developed world approaches. Faculty should be familiar with the therapeutic regimens at the front of the syllabus and discuss deviations from these. Dosing regimens, drug interactions, and adverse reactions should be discussed in detail for each medication that is being used.
- 7) It should be made clear whether the patient being seen is typical or not of others with the same diagnosis. Anecdotes about previous patients seen with the same disease are helpful.
- 8) Photo-taking during rounds is disruptive to the educational process. Photos should be taken only after rounds are finished for the day or during other off-hours. Voluntary non-pressured oral consent needs to be obtained from each patient. In giving permission to photograph IMT patients you agree to assign copyright to such images to IMT, UPCH.