

Title: Cadaver Based Procedural Skills Training in Pre-Clinical Phase of Medical Undergraduate (MBBS) Course

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What Problem was addressed: In many countries, including Nepal, medical graduates are posted independently in small rural hospitals where they are expected to fulfill the roles and responsibilities of a general practitioner. Given the large size of classrooms in these countries it is not always possible for these medical graduates to master the skills that require multiple exposures and hands-on practices. General skills like communication skills, history taking, general physical examination etc. can be instructed in large classrooms and students can practice them as many times as they want; on the other hand, procedural and surgical skills do not provide the same luxury. The concept of skill lab has been introduced to overcome this problem but most medical schools of third world countries have constraints that do not allow them to have a full-fledged skill lab. Consequently, it is not uncommon for patients to be referred to higher centers for the purpose of performing procedure.

What was done: A need assessment was performed using a web based survey in medical graduates who were currently independently posted in small hospitals to identify the procedures that are commonly performed in that set up and procedures that frequently require referrals to higher centers. Feasibility study was performed to identify the skills that could be performed on cadavers. Technical collaboration was done with Dr. Robert & Dorothy Rector Clinical Skills & Simulation Center of Thomas Jefferson University, Philadelphia, Pennsylvania and other medical schools of Nepal.

Using the results of need assessment and feasibility study, a pilot hands on cadaver based procedural skills training was conducted for second year MBBS students.

Informed written consent was obtained from all participating students. The time for the training was beyond the normal class hours and the assessment of the training had no value in summative assessment. The instructors were from various departments of three different institutions of Nepal. The training was designed in such a way that it was integrated with 'Gastrointestinal Block' of curriculum. All students participated in the training.

The assessment has been planned longitudinally; at completion of basic science phase, middle of clinical phase and at the completion of the program. Earlier class will be used as control group.

What was learned: The need assessment study showed that one fourth of all referrals from peripheral small hospitals were for need of procedures. Referrals for solely the purpose of performing procedures had many detrimental social and economic implications. Common procedures that required referrals were also identified. The procedure identified using results of need assessment, feasibility study and collaborative opinion was 'abdominal Paracentesis'. The study showed that our medical graduates need more training to perform clinical procedures independently. The training can be provided to them in early part of their medical education using cadavers as dummy patients. The effectiveness of such training in graduating doctors will be determined after the longitudinal assessment.