

Procedures performed by family physicians in hospital practice in a developing country (South Africa) - an evaluation of clinical anatomy competence

Johannes Marinus Boon

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**Supervisors: Prof JH Meiring (University of Pretoria)
Prof PH Abrahams (Girton College,
University of Cambridge and Kigezi
International School of Medicine, Cambridge)**

12. Summary

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Boon Johannes Marinus¹

Supervisors: JH Meiring¹, PH Abrahams²

¹ **Department of Anatomy, School of Medicine, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa**

² **Girton College, University of Cambridge, Kigezi International School of Medicine, Cambridge, United Kingdom**

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The safe and successful performance of office procedures, surgical procedures, and emergency procedures as well as radiological imaging procedures demand a working and yet specific knowledge of anatomy. This study focuses on the competency to perform clinical procedures, especially the underlying anatomical knowledge base necessary to perform a safe and successful procedure. No study reports on the assessment of clinical anatomy as part of the competency of family physicians to perform clinical procedures.

The aim of this study was to determine a) which clinical procedures are performed in hospital practices in South Africa; b) the frequency of performance; c) the importance rating of clinical procedures; d) the comfort of performance; e) difficulties and anatomically related complications encountered; f) the role of clinical anatomy competency in reducing difficulties and complications; g) the role of clinical anatomy in improving confidence of performance; h) a selection of 15 problem procedures; i) the relevant clinical anatomy necessary to perform these procedures and j) to develop a clinical anatomy training program for these procedures.

A list of 57 procedures relevant to family practice in South Africa was compiled and a questionnaire completed by doctors at various hospitals, which were randomly selected in three provinces in South Africa. A total of 102 questionnaires were obtained and analyzed.

The following procedures were selected which were performed often (>50%), ranked important, encountered most difficulties and complications, where more doctors were uncomfortable than comfortable and where the influence of clinical anatomy knowledge on the safe and successful performance of the procedure, was ranked highest: Central venous catheterization, cricothyroidotomy, pericardiocentesis, great saphenous vein cutdown, oro/naso tracheal intubation, lumbar puncture, appendectomy, cesarean section, reduction of uncomplicated forearm fractures, ectopic pregnancy surgery, epistaxis and nasal packing, rectal examination, proctoscopy and sigmoidoscopy, knee joint aspiration, wrist and digital nerve block and obstetric ultrasound. A referenced knowledge base was developed by an extensive literature search of the selected procedures under the following headings: Indications, contraindications/ precautions, step by step procedure, anatomical pitfalls and anatomically relevant complications. This was expanded to develop a Virtual Procedures Clinic, an interactive multimedia package.



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13. Attached: CD-ROM: The Virtual Procedures Clinic	