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Evaluation of medical interns' knowledge and confidence in orthopaedic surgery at the University of the Witwatersrand's academic hospital complex in Johannesburg, South Africa

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Title of Project: EVALUATION OF MEDICAL INTERNS' KNOWLEDGE AND CONFIDENCE IN ORTHOPAEDIC SURGERY AT THE UNIVERSITY OF THE WITWATERSRAND'S ACADEMIC HOSPITAL COMPLEX IN JOHANNESBURG, SOUTH AFRICA.

Abstract

Background

Junior doctors' knowledge and confidence in the assessment and treatment of musculoskeletal disorders and injuries has previously been shown to be limited, both locally and internationally. This has far-reaching consequences, not least of which is sub-optimal patient care. The aim of this study was to evaluate the effectiveness of current undergraduate orthopaedic training in South Africa.

Materials and methods

Medical interns rotating through the orthopaedic departments of three academic hospitals in Johannesburg, South Africa were surveyed, using a validated questionnaire consisting of twenty-five questions, to assess their knowledge of orthopaedic surgery. Furthermore, they were asked to rate their self-perceived confidence levels relating to various aspects of the care of individuals with musculoskeletal problems using a 5-point Likert scale. The future career interest of the interns was also recorded.

Results

Seventy-eight completed questionnaires were included in this study for analysis. Ninety six percent (96%) of the medical interns in this study failed to achieve basic cognitive competency concerning knowledge of orthopaedic surgery. Three out of seventy-eight medical interns in this study achieved basic theoretical competency in orthopaedic surgery. The interns' mean score in the 25-question examination was 40.7% (SD 13.4%) with a range of 17 – 69%. Ninety two percent (92.3%) of participants reported that they were either confident or highly confident in orthopaedic surgery. Future career choice had no influence on the knowledge of orthopaedic surgery.

Conclusion

The effectiveness of South African undergraduate training of orthopaedic surgery is deficient. Recent South African medical graduates' knowledge of orthopaedic surgery is inadequate, with a mean score of 40.7% in the Freedman and Bernstein questionnaire, and only 3.8% of interns achieving theoretical competency. The graduates demonstrated inappropriate confidence in orthopaedic surgery with only 7.7% acknowledging a lack of confidence. Interns' future career interest was not found to have a significant association with knowledge of orthopaedic surgery. This study suggests that, in South Africa, orthopaedic undergraduate training needs reform.