

DEVELOPING RATIONAL PRESCRIBING COMPETENCE IN MEDICAL SCHOOL: AN INVESTIGATION OF THE RELATION BETWEEN STUDENT PERCEPTIONS AND EXAMINATION PERFORMANCE

Shirra Moch



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DECLARATION

I declare that this research report is my own unaided work. It is submitted for the degree of Master of Education (Tertiary Teaching) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other University.

Shirra Leah Moch

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ABSTRACT

Prescribing medicines is the primary intervention that most doctors offer to influence their patients' health; however concerns have been expressed about the extent to which graduates are prepared by medical schools to assume prescribing responsibility. Both students and clinical teachers have identified a gap between workplace prescribing demands placed on newly qualified doctors and their preparation for this complex activity during undergraduate training. This study explored the exit-level prescribing performance of final-year students in the Graduate Entry Medical Programme at the University of the Witwatersrand compared with students' perceptions of their prescribing competence. The results indicated a disparity between students' competence and confidence. Examination marks showed that 83.6% of students were competent to prescribe according to the graduating standards of the University; however, questionnaire data revealed that 66% of students did **not** feel that their training had enabled them to prescribe rationally. This inconsistency was explored by analysis of the examination papers according to Bloom's Revised and the SOLO Taxonomies. It was concluded that students score well on questions which test recall and application of knowledge, but some do not manage questions involving evaluation. Since prescribing is a complex skill that requires evaluative competence, this may explain why, despite high examination scores, students remain insecure. Exploration of the structure of knowledge through a Bernsteinian lens revealed that curricular components including problem-based learning and horizontal integration constrain epistemic access to the structure of rational prescribing knowledge for some students. It is recommended that rational prescribing skills should be taught as a synchronous strand within the curriculum, rather than in the current integrated mode. Learning could also be improved by innovative pedagogies associated with active learning and improved feedback.

Key Words: Medical education, rational prescribing, curriculum, assessment, student perceptions

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