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### INFLUENCE OF CONFIDENCE AND EXPERIENCE ON THE COMPETENCY OF JUNIOR MEDICAL STUDENTS IN PERFORMING BASIC PROCEDURAL SKILLS

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#### Context and setting

Studies, mostly done with final-year medical students and doctors, show that the confidence level with which a clinical skill is performed is not a reliable benchmark of actual clinical competence. This inaccurate self-evaluation of proficiency has far-reaching implications, e.g. the inability to identify learning deficiencies and consequently to manage learning – both essential components of self-directed learning programmes.

#### Why the idea was necessary

The purpose of this study in comparing self-reported competence and actual competence was threefold, i.e. to discover students' perceptions concerning their competence of specific procedural skills; to establish what the actual competence level of junior medical students were with regard to these skills; and to raise student awareness of the value of accurate self-evaluation.

#### What was done

Third-year medical students at the Faculty of Health Sciences, Stellenbosch University, attended a training session in the Clinical Skills Centre (CSC) at the beginning of a year. Supervised by clinical tutors, they practised three basic procedural skills on part-task trainers/bench-top manikins, i.e. commencing an intravenous infusion; performing simple wound closure (suturing); and administering an intramuscular injection. During the remainder of the year, they returned in smaller groups in their Family Medicine rotation for formative assessment of these skills, using an OSCE. Before performing the clinical procedures, students had to rate their perceived competence. Clinical tutors then used checklists to rate actual student competence when performing these three skills.

#### Evaluation of results and impact

In accordance with similar studies, there was poor correlation between self-reported and actual competence regarding the performance of procedural skills. There were, however, significant correlations between self-reported competence and clinical experience ( $r=0.49$ ,  $p=0.00$ ) as well as between experience and actual competence ( $r=0.36$ ,  $p=0.00$ ). It seems that junior students lack the necessary critical self-assessment skills to accurately evaluate their performance of certain basic procedural skills. However, frequently performing these skills in the clinical setting (or elsewhere) increased both self-reported and actual competence in these students.

Before this study, junior medical students had limited formal clinical skills teaching in the CSC and, because of the already overloaded curriculum, were not assessed with regard to such skills. As a result, the onus rested on the student to gain these and other, often ill-defined, skills in the clinical setting. Since the completion of this study, a logbook system has been introduced to encourage students to make the most of the opportunities in the clinical setting to practise the skills taught in the CSC.

Furthermore, a core clinical skills curriculum was compiled, indicating which skills should be taught in simulation and which in the clinical setting, as well as the competency levels (based on Miller's Framework for clinical assessment) at which these skills should be performed. From 2011 students will be subjected to a summative OSCE to assess their clinical skills competency.

### CRACKING THE NUT OF SERVICE LEARNING IN NURSING

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#### Context and setting

Higher education institutions (HEIs) worldwide are being held more accountable for the effectiveness and relevance of their educational programmes and are being challenged to 'reinsert the public good into higher education'. These reasons have contributed to the development of the service learning movement globally. In South Africa service learning became entrenched in HEI policy documents less than a decade ago. Although there are national policy guidelines for community engagement and service learning as a particular type of community engagement, the implementation of service learning has occurred sporadically as HEIs are struggling with the many changes at all societal levels.

#### Purpose

While the school of nursing at the University of the Western Cape is cognizant of this national policy imperative as stipulated in the guidelines of the Higher Education Quality Committee, how these statements will be operationalised within the undergraduate nursing programme has not been addressed. The question that therefore needs to be asked is what teaching staff perceive to be the enablers and challenges for institutionalising service learning in the programme by exploring the perceptions of those involved in teaching on the programme.

#### What was done

An exploratory, descriptive, contextual design was used. Participants, who included academics ( $N=18$ ) and clinical supervisors ( $N=18$ ) employed at the school of nursing, completed a self-administered, structured questionnaire, adapted from Furco's self-assessment rubric for the institutionalisation of service learning in higher education.

#### Results of results and impact

The preliminary results reported here are part of a wider investigation into the implementation of service learning in selected modules in the undergraduate nursing programme. The findings reveal that the school of nursing has to engage in critical mass building activities because none of the respondents was aware of the Higher Education Quality Committee's assessment criteria for service learning. Approximately 9% indicated awareness that the institution has an official definition of service learning that is used consistently to operationalise most aspects of service learning on campus. However, the majority (91%) reported on the absence of a campus-wide definition of service learning, the inconsistent use of service learning to describe a variety of experiential and service activi-

# Abstracts

ties, or that they were unsure. Respondents indicated that institutional and departmental involvement in service learning for academics, students and community participation was minimal. Although three respondents attended training sessions, all indicated that they would either like to receive information about the national service learning policy guidelines, or attend training sessions on service learning.

## Conclusion

It can therefore be concluded that the academics and clinical supervisors are willing to participate in activities to overcome the challenges identified. It is therefore recommended that a tailor-made training programme be designed to address the needs of the school of nursing in order to institutionalise service learning in the undergraduate nursing programme.

## INTEGRATING PRIMARY HEALTH CARE PRINCIPLES IN CLINICAL TEACHING

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## Context and setting

Primary health care (PHC) was adopted as a lead theme for curriculum transformation by the Health Sciences Faculty of the University of Cape Town in 1994. However, integration of PHC in clinical teaching remains limited at the secondary and tertiary levels of care.

Prior to embarking on this project, recent experience and data from the Department of Medicine suggest that clinicians at all levels of the health care system can apply these principles in clinical teaching if they are familiar with them. The established Clinician Education Course (CEC) provided an ideal opportunity to modify a module to focus on teaching the PHC principles as relevant to clinical teaching.

## Why the idea was necessary

Different strategies to integrate the PHC principles in all clinical teaching are necessary for holistic individual and community health care. The CEC was chosen as one approach to provide clinicians with an approach, and the skills and knowledge needed to impart to students the importance and application of the principles of PHC in clinical care.

## What was done

A module of the CEC was re-designed and introduced in 2010. An in-depth qualitative study was conducted with 8/15 (53%) of the participants who completed the module. Participants completed a pre- and post-module questionnaire on their knowledge of PHC and their perceptions of integrating PHC principles in their own clinical practice and teaching. This was followed by observation of their clinical teaching and an in-depth semi-structured interview. The data related to pre- and post-module knowledge of PHC were analysed using basic tools of discourse analysis. The rest of the data from the questionnaires, in-depth interviews and observations were triangulated and analysed according to the impact of the course on different levels using Freeth *et al.*'s modification of Kirkpatrick's model for evaluation of educational outcomes at different levels.

## Results and impact

Participants' post-module knowledge shifted from disorganised, point form, concrete examples to a more coherent understanding of PHC and

the PHC principles. Seven participants, 3 each from family medicine and speech therapy and audiology and one from psychiatry, claimed to already be using the PHC principles in their clinical teaching prior to the course. This was corroborated by observation of their clinical teaching and/or further explanation in the semi-structured interview. The aspect that all identified as needing further attention, and where greater insight was gained, related to equity of care and violation of human rights within the health care system. The last participant from a tertiary speciality was finding it more difficult to incorporate the PHC principles. All eight had identified areas of action for individual and organisational change in the future.

'...it's about changing the country and I'm saying to them can we make a difference to healing the nation. So they'll be laughing about it because it is lofty ideals, but PHC is about that, it is about lofty ideals. It's about healing the nation.'

## INTRODUCING CASE-BASED LEARNING IN DECENTRALISED NURSING PROGRAMME

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## Background/context

The approach to teaching and learning in rural decentralised settings has predominantly been didactic. To introduce a more student-centred approach, a case-based learning programme focussing on primary health care (PHC) was undertaken.

## Aim/purpose

This project aimed to facilitate the introduction and implementation of case-based teaching and learning approach in a decentralised PHC programme at the school of nursing.

## Method/what was done

An exploratory descriptive needs assessment survey was administered to 65 PHC programme facilitators. The survey canvassed their perceptions on case-based learning and their ability to construct cases and facilitate case-based teaching in the classroom. It also explored their resource(s) constraints.

## Results and discussion

The participants were positive towards case-based learning approach. However, they acknowledged limitations in their skills to design cases and facilitate teaching sessions. They also identified a lack of resources which would hinder the successful implementation of the programme. Two capacity development programmes were conducted to facilitate the construction of cases and enhancing facilitators with the skills to facilitate case-based classrooms culminating with drafts of a case study booklet and facilitators' manual. A mobile suitcase library was introduced with all the necessary resources for the PHC programme.

## Conclusion/take home message

This project will help the school to produce a different kind of graduate who will be in possession of transferable core skills. Effective mechanisms for close monitoring of students' learning and early identification of students with problems will be enhanced. Continuous support is needed for facilitators to gain confidence in case-based teaching.