

AN INNOVATIVE STRATEGY TO EXPAND CLINICAL EDUCATION: A REPORT ON THE STUDENTS' VIEW

ABSTRACT: *Clinical education is an integral part of undergraduate physiotherapy training. The minimum hours of clinical training required differ from country to country. As a result of a magnitude of reasons, academic institutions find it increasingly difficult to place their students at appropriate clinical sites. Consequently, the physiotherapy department at Stellenbosch University has embarked on an innovative approach to substitute this shortness of placements for 3rd year physiotherapy students in 2003. Once all the students had rotated through this new cluster of learning opportunities, the students evaluated this approach. A self-developed questionnaire consisting of open-ended questions was used for this survey. The response rate was 83%. The vast majority of students found the structure of this new block enjoyable and meaningful. It will therefore be continued in the future and evaluated on a regular basis.*

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INTRODUCTION

Clinical education is a cornerstone in the training of health care professionals. Baldry Currens and Bithell (2000) highlight this when they state that "exposure to patients in the clinical situation offers a unique experience which cannot be replicated elsewhere" (p 645). It is crucial in the universities' efforts to develop independent practitioners who can address the health needs of the population.

In South Africa, the Health Profession Council (HPCSA) suggests that physiotherapy students undergo a minimum of 1000 hours of clinical training. This compares well to other countries. In Australia, the United Kingdom and the United States of America, a

minimum of 1000 clinical hours is currently the norm (personal communication with the physiotherapy associations or universities of these countries). All these representatives indicated that they are presently in the process of revising clinical training.

World-wide it seems to be problematic to source sufficient clinical placements for undergraduate training. The reasons for this include:

- Universities increasing their yearly intake of undergraduate students for various reasons (Baldry Currens and Bithell, 2000; Cross 1995; Noswothry, 1990),

- Changes in undergraduate teaching and learning strategies (Strohstein et al, 2002; Baldry Currens and Bithell; 2000; Mbambo, 1999;),
- Poor perception of the role of the clinical educator (Moore, 2001; Cross, 1995),
- Pressure on the clinical educator to reconcile the roles of clinician and supervisor (Bennett, 2003; Cross, 1995),
- Increased medical litigation, and
- Pressure on clinical areas to account for productivity (Ladyshewsky et al, 1998).

In South Africa, the above is compounded by the following staffing issues:

- A continuous decrease of clinical staff in the urban areas in which most of the health sciences faculties are located. The reasons for this are complex and beyond the scope of this report,
- Seemingly rapid turn-over of staff,
- Community health centers and rural hospitals either not staffed by physiotherapists at all or by junior therapists (including compulsory community service therapists) who find it daunting to supervise students.

As a result of the above challenges, academic departments continually have to strive to develop novel ideas to ensure appropriate clinical exposure for their students in order to honour their mission to train future health-care professionals.

In 1999 a new and fully revised physiotherapy curriculum was introduced at Stellenbosch University. According to the structure of this new curriculum, clinical training starts in 2nd year and continues through to 4th year with an increasing number of clinical hours in successive years of study. The 2004 graduates will have completed a total of 1370 clinical hours. At the beginning of

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2003 we faced the problem of having more 3rd year students than available clinical placements and brain-stormed about alternatives for the traditional placements. In the new curriculum 3rd year students had four different clinical blocks of 5 weeks (half days) each. These placements were spread throughout the whole spectrum of health-care delivery in the public sector. It was decided to continue with three conventional blocks and introduce a new block, the so-called "In-block". Five broad main aims for this new block were formulated, i.e.:

1. To expose the students to a wider range of health-care delivery situations, different clinical areas and professions;
2. To provide the students with an opportunity to practise practical skills during structured peer-evaluation sessions;
3. To give the students opportunities to practise clinical reasoning skills in neurology and orthopaedics;
4. To give the students opportunities to use self-managed time and to provide evidence of that;
5. To give the students an opportunity to do a practical test for the module Applied Physiotherapy (AP) on patients.

The following weekly activities were planned for each 5-week block:

- **Visits:** Pairs of students rotated through the following areas: 3 private physiotherapy practices, an Occupational Therapy department at a mental health hospital and a home for disabled children. These visits were introduced in order to give the students some insight into the work of physiotherapists who work outside the public health sector and to also allow them to observe the approach and challenges to service delivery in a mental health hospital. These three areas of health care were previously not included in our 3rd year clinical curriculum.
- **Peer evaluation of practical tests:** During these sessions students were given previously used objective structured clinical examinations (OSCE's) and practical examination

papers (a different subject was addressed each week). The sessions were based on a study by Geddes and Crowe (1998). Students rated each others' work and met at the end of each session to discuss possible problems they identified with the subjects evaluated.

- **Clinical reasoning (Neurology):** Activities included movement analysis using videos, formulation of problem lists and aims of treatment, role-play of a client interview and a visit to the neurosurgical high-care unit in preparation for the 4th year clinical block.
- **Clinical reasoning (Orthopaedics):** Activities included applied anatomy, patient evaluation in traumatic- and non-traumatic orthopaedics, refinement of techniques and a practical test performed on consenting patients. The latter activity was deemed necessary in order to assess the students' ability to demonstrate techniques on a patient and not only on models or peers as was usually the case in evaluation of the module Applied Physiotherapy.

The activities on each of the days left sufficient extra time which the students could utilize as they saw fit.

At the end of the block each student had to hand in a written reflection on the block as a learning experience. This was handled confidentially and no marks were allocated to this block.

As it is university policy to ensure formal student evaluation of all modules on a regular basis, the module Clinical Physiotherapy 3 was evaluated in this manner at the end of 2003. For reasons of accountability and planning for 2004 we also considered it necessary to determine whether or not the students found the new "In-block" a valuable learning opportunity in order to establish whether the block should be continued for the next group of 3rd years. This was done by conducting this descriptive survey.

METHODOLOGY:

On completion of the 3rd year clinical module in November 2003 all 42 students were requested to evaluate the entire module as per university policy, using standardized faculty evaluation forms

(this took place in one of the department's lecture rooms). They were also requested to appraise the new "In-block" separately and anonymity was ensured. For this purpose a questionnaire was developed by the authors to capture the students' opinions about the block. The following guiding open-ended questions were asked to cover each of the five broad aims of the block (see above):

- Do you think you have reached that aim? Please expand.
- Did you find the learning opportunities appropriate?
- Which shortcomings did you experience?
- Any other comments about the block.

The questionnaire was in Afrikaans only, but students could answer in a language of their choice. All 42 students were included in the study and no exclusion criteria applied.

Data was analysed by grouping the responses to the questions for each of the five aims into themes and summarizing these. As most students did not respond specifically to each question for each aim, the answers were analysed globally for each of the five aims.

RESULTS

The response rate was 83% (35/42). The results that follow are therefore based on n=35. Seven questionnaires (7/35 or 20%) were answered in English, while the remaining 28 were completed in Afrikaans.

In the following, the responses for each of the aims are summarized and highlighted with direct quotes from the students (these are given in italics). The first author translated the responses into English.

Aim 1: To expose the student to a wider range of health-care delivery situations, different clinical areas and professions

All students indicated that this was an appropriate aim and that they found the visits useful. They highlighted that the visits to the private practices were particularly enlightening as they did not usually have exposure to this aspect of physiotherapy during their training. The following comments illustrate points made:

- It exposed us to many fields and opportunities in our profession which many of us were unaware of.
- Interesting to observe different approaches to patients by qualified physiotherapists

Seven students (20%) pointed out that the visit to the Occupational Therapy department was not sufficiently representative of the role of these professionals in health-care delivery. Some also commented that they were only exposed to a wider area of physiotherapy rather than to different professions.

Aim 2: To provide the students with opportunities to practise practical skills during structured peer-evaluation

While all the students except one indicated that they found the planned activities appropriate, 17% (6/35) pointed out that there was insufficient 'control' by the department during the peer evaluation session. They suggested that a lecturer be available to clarify outstanding matters and/or supervise the session. Students appreciated that the activity allowed them "to revise the basics in a structured manner".

Aim 3: To give the students opportunities to practise their clinical reasoning skills in neurology and orthopaedics

Again, all students found this an appropriate aim and they appreciated the opportunities that were available. Comments included:

- This was great and helped with integration.
- Problem solving in small groups is much less threatening than in the big class.
- I especially understand the problem lists much better now.
- I found this to be the most important learning experience in this block.
- I was at last able to put theory into practice.

Six students (17%) suggested that similar activities should be planned for problem solving in medical and surgical conditions, another three (9%) requested more emphasis on traumatic orthopaedics and one indicated that more time should be spent on activities to reach this aim.

Aim 4: To give the students opportunities to use self-managed time and to provide evidence of that

All students valued it highly to have more time at their disposal.

- I loved the extra time! It gave me a chance to catch up where I might have fallen behind.
- I often went home to look up things and go over the work.
- It was nice to be able to take a breather from the usually hectic schedule.

However, some students acknowledged that they did not always use the time effectively:

- I personally did not use the extra time for academic matters.
- Your time is your own responsibility.
- You had to be self disciplined in order to manage time effectively.
- This was resting time for me.

Aim 5: To give the student an opportunity to do a practical test for the module Applied Physiotherapy (AP) on patients.

Six students (17%) indicated that it was very stressful and daunting to do a practical test on a patient when on the first block, i.e. did not have any previous exposure to patients. Two students also found the task not altogether clear. All students however indicated that in principle it was a good idea to do a practical test on a patient. The following comments highlight this:

- Class mates do not present with any of the complications a patient does. It also taught me that patients do not always understand my instructions.
- Doing pracs on patients is more realistic. I think it tests your ability to communicate with patients as well.
- I feel this is a better method of evaluation.

General comments

Only eleven students (31%) completed the section "general comments". They all indicated that this novel approach was a good idea and should be continued. Two typical comments summarize this:

- *Lekker, interesting block. Continue with this.*
- *Thanks, was definitely worth it!*

DISCUSSION

The findings of this study indicate that most of the 3rd year physiotherapy students in 2003 enjoyed this new learning opportunity that differed from the traditional model of clinical education applied at our department.

There are however some methodological flaws regarding the study: The Afrikaans responses were translated into English by a single person. While she is fluent in both languages, some inaccuracies may have occurred during the translation process. Furthermore, all the questions on the questionnaire were open-ended and it was expected that the respondents replied to each of the four questions for each of the five aims. As this did not happen, either due to insufficient space on the reply sheet or due to the fact that the respondents were pressed for time or tired at the end of a long academic year, responses had to be coded for each aim and the sub-divisions (individual questions) were lost. These should have given a much clearer picture of the students' opinions. In addition, the main objective of the questionnaire was to capture feedback from the students to assist with planning for the upcoming academic year and not necessarily for rigorous scientific research. In case of the latter a pilot study should have been conducted in order to test the utility of the questionnaire.

In view of the pressing challenges for academic physiotherapy departments world-wide to source sufficient numbers of clinical placements for clinical education (Bennett, 2003; Baldry Currens and Bithell, 2000), this new approach may be of benefit for other training institutions as well. A fair amount of co-ordination is necessary, especially at the beginning of the year. By providing additional learning opportunities for the students, we hope to have enabled them to practise clinical reasoning skills in a small group and unthreatening environment. In addition, the finding that they commented particularly positively on their visits to the private practices alerted the department to the fact that this may have been missing in the traditional clinical programmes, which, apart from an elective in 4th year, focus on the public health- and education systems

respectively. However, physiotherapists have career opportunities in a much wider range of service delivery and should be exposed to as many of those as possible during their under-graduate training in order to be able to make career choices.

Regarding the peer-evaluation session and some students' requests for more guidance, the aims of these sessions should be made clearer to the students at the beginning of the block. Geddes and Crowe (1998) found in their study investigating this approach in a group of Canadian physiotherapy students, that peer-rated OSCE "provides opportunity for student learning, formative evaluation and familiarization with the process" (p 268) which was highly rated by their study sample.

Physiotherapy students usually have a very full academic programme. It was therefore deemed necessary to allow for more self-managed time in our new curriculum to enable the students to become self-directed learners and not pure rote learners who cram every minute of the day with new information. The students clearly appreciated to have more time at hand. While some seemed to have used this time to deepen their understanding of the subject matter, others may have chosen to use this time for non-academic purposes. This does not necessarily pose a problem, as students seem to be well aware that they carry

self-responsibility regarding their studies. However, with the introduction of this block the time spent on direct patient management has been decreased, which is not problematic as the total hours of clinical training are still well beyond the recommended 1000 hours.

The students showed insight when they stated that they considered doing a practical test on real patients to be a more appropriate manner of evaluating their skills learned in the AP module. However, when choosing this approach, training institutions must ensure that the students are well versed in those skills prior to using patient models for examinations. The six students who commented that this manner of testing their skills on their first clinical block was highly stressful, alerted the department to the fact that these students could have been disadvantaged in relation to their peers and this was addressed in 2004.

The findings of this survey indicate that the students found the "In-block" a valuable addition to their clinical education. When planning for the 2004 academic year, it was decided to continue using this approach but to introduce changes as suggested by the students and in accordance with the guiding motives of our new curriculum.

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BOOK REVIEW

LEADERSHIP IN HEALTH SERVICES MANAGEMENT

Jooste, K (Editor) 2003.
Cape Town: Juta.

This book is one of the prescribed books for the MSC (NRSE716) Advanced Nursing Services Management course work for 2004 and 2005. It should be noted that the book could be prescribed for post graduate programmes for students in all health services management courses and not only for students in Nursing Sciences. At the same time it could be good reading for all managers in health services

to update their knowledge regarding leadership issues and strategies.

The book is applicable to all Health Services Management courses at the University. The book is unique in the sense that it is applying management and leadership principles to the every day issues in health services in South Africa and Africa. A wide range of authors in the South African and in the African context contributed to the book.

The book's approach is user friendly regarding student needs and practical

applications and case studies. Each chapter has objectives in the beginning of the chapter and self evaluation questions at the end. A framework for each section and a short summary of the contents are provided which guide the student through the different issues in the book. The index at the end makes it easy for the student to look up the different terminology in the book.

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