Article

Developing a standardised patient programme in a primary healthcare curriculum: A needs analysis

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Background and objectives. The use of standardised patients (SPs) in medical education is well documented, mostly in developed settings. The aim of this study was to conduct a needs analysis for the development of a patient-centred SP programme within a primary healthcare (PHC)-led curriculum at the University of Cape Town (UCT) in South Africa, and to make recommendations for its development.
Methods. A mixed methods study was conducted which included focus groups with fourth-year medical students (n=17), a questionnaire for third-year medical students (n=181), a questionnaire for patients who were examined by students (n=28), and quantitative tracking of patient-student encounters.
Results. While students experienced significant challenges in sourcing suitable patients for interviewing and examination, the majority placed such value on the interaction with real patients that benefits outweighed the challenges. For students, challenges included seeing patients who had minor or no clinical signs in order to complete their portfolio tasks. For patients (especially those with clinical signs) it included being examined multiple times by students. Despite this, most patients expressed a desire to play a role in students' education. The study revealed areas of tension and inconsistency with the philosophies of a PHC curriculum, specifically in the areas of patients' rights and the role of patients as 'active teachers'.
Conclusions. An SP programme at UCT could help with the skills development in second year. However, this role should include exploring the doctor-patient-student power relations with students, with a view to encouraging a more patient-centred professional identity for students.

AJHPE 2012;4(2):97-101. DOI:10.7196/AJHPE.170

The use of standardised patients (SPs) in medical education is well documented in the USA and other developed settings, where SPs are used for teaching,[1-2] the development of communication skills,[2-3] and the assessment of clinical competence through objective structured clinical examinations (OSCEs).[1,4] Vu and Barrows have defined an SP as 'a real or simulated patient carefully coached to present a patient problem accurately and in a standardized manner for all examinees'.[5] Medical students taught with SPs have shown similar levels of competence to those taught using inpatients[6] and virtual patients.[7] The use of the 'ideal SP' (a real patient with first-hand experience of a condition, who also has knowledge and teaching skills) seems to offer significant benefits, particularly in the development of certain skills and attitudes among students.[8,9] Reported challenges for SPs relate to their emotional wellbeing and physical stamina, but are outweighed by benefits to learners, patients and educators.[9] In fact, a systematic review described SP experiences as 'positive', 'enjoyable' and 'empowering' and students' experiences as generally positive and valuable.[8] However, since SP programmes require significant resources, medical schools in developing countries (such as on the African continent) more commonly utilise real patients for teaching and assessment. Subsequently, literature on SPs in medical education mostly originates from developed countries, with little information on its relevance in the African setting.

The PHC approach

The notion of 'patient-centredness', while central to many Western medical curricula, has particular historical relevance in African medical schools as it underpins the primary healthcare (PHC) philosophy laid out at Alma Ata in 1978.[10] In South Africa, the PHC philosophy has been central to health reforms in the post-apartheid era and has ideological relevance in the country's medical curricula. The patient-centred nature of PHC challenges the traditional medical model by denouncing inequality in care, by acknowledging the right of people and communities to be involved in decision-making, and by viewing healthcare as a collaborative act.[11]

In defining a patient-centred approach to the clinical consultation, Illingworth[12] identifies two essential components: a holistic view of the patient, which includes the patient's perspective and feelings, and shared control of the consultation, decisions and management. PHC-orientated curricula should therefore include teaching-learning activities that create opportunities for a power shift towards the patient. Bleakley and Bligh[13] advocate early and sustained patient contact as the basis of a patient-centred curriculum, suggesting that this mutually beneficial dialogue between student and patient (with the doctor/educator in a supporting role) informs the development of a truly patient-centred professional identity. This is a departure from the traditional approach, where the patient plays a more passive and supportive role in the doctor-student relationship.[13]

Local context and background

Medical students at the University of Cape Town (UCT) follow a PHC-led, spiral, integrated problem-based learning (PBL) curriculum with minimal patient contact in the first 2 - 3 years. Clinical interviewing and examination skills are taught by clinical skills educators (nurses) during the 2-year clinical skills course, and students generally practise their technique on each other until their third year, when they can start seeing patients in the adjoining tertiary hospital as a self-directed learning activity. However, the students and educators complain of serious logistical challenges in sourcing patients that have clinical symptoms and signs and are willing and well enough to manage multiple student examinations. The situation is complicated by the fact that inpatients at 'teaching' hospitals often have multiple co-morbidities unsuited to undergraduate student training.

During this time, students are marginally exposed to SPs through tutorials with the Patient Partners, a group of elderly, trained rheumatoid arthritis patients. Trained role-players are also used as 'patients' for OSCE assessments. However, lack of funding and the Faculty's perceptions about the value of SPs in the African context make it difficult to attract and retain suitable SPs. In developed settings SPs have been shown to play an important role where access to patients is a challenge, for example if patients are not suitable for undergraduate teaching, patients are too ill or unwilling to be examined, or staff are not available to teach in these settings.[2] The question was raised whether a local SP programme could address these challenges with similar success. This programme – potentially called Partners in Clinical Training – would also need to be embedded in the PHC approach, with explicit emphasis on patient-centredness and patients' human rights.

To make recommendations regarding the development of such a programme, it was decided to explore the experiences and perceptions of third-year medical students and ward patients during and after the final 8 weeks of the clinical skills course which is a large self-directed learning component and takes place in the clinical areas.

Research aim

The main aims of this study were to investigate the need for a SP programme at this institution, and identify specific challenges relevant to a PHC-led curriculum. A secondary aim was to highlight areas where the existing research on SPs may differ from that in the African context.

Methods

A mixed methods study was conducted that included focus groups, student and patient questionnaires, and quantitative tracking of patient-student encounters.

Focus groups

While the study focused on third-year students and their patients, it was decided to use fourth-year medical students' ward experiences to identify relevant themes. Three focus group discussions (n=17) were done, and were facilitated by a trained, experienced qualitative facilitator. The groups reflected the racial and gender diversity in the class. Students were not given an incentive to participate, but refreshments were provided. The discussions were audio-recorded, and findings were used to identify key issues for developing a third-year student questionnaire. Students were asked to discuss their challenges and experiences of working with real patients and with SPs (Patient Partners) in a teaching environment, whether they thought that ward patients' human rights were being infringed through these student encounters, and their views and recommendations on a SP programme at UCT.

Student questionnaire

An online questionnaire, based on themes identified by the senior students' focus groups, was compiled by the research team and administered to third-year students at the end of their 8-week Clinical Skills course (n=181, 97% response rate). Students were given the option to comment on any point if they wished to. All students gave consent to participate, and were aware that their participation was voluntary and anonymous.

Patient interviews

Ward patients who were examined by third-year students and gave consent to participate in the study (n=27) were interviewed by Clinical Skills educators. It was felt that patients were already familiar with the educators, and that brief, structured interviews rather than written questionnaires would pre-empt potential difficulties arising from low literacy levels or limited language proficiency. Structured questions, based on themes identified by focus groups, were used. Patients were asked how they felt about being examined (even repeatedly) by third-year students, whether they felt obliged to see students, what they thought of the students, and how they personally experienced the encounters. Patients were also asked to share their opinion on the role and rights of the patient in hospital (in this case, a tertiary, academic facility).

Quantitative tracking of patient-student encounters

Data were collected on patient-student encounters by the Clinical Skills educators over the 8-week block to identify what the specific challenges were in sourcing ward patients.

Data analysis

Focus group discussions were transcribed verbatim, and a process of constant comparative analysis[14] was used to generate summaries of the discussions. The themes were structured according to the following categories:

- general comments
- experiences of looking for and examining patients
- patient rights
- benefits and challenges of having real ward patients

- experiences of working with Patient Partners
- recommendations for an SP programme.

Student questionnaire data were analysed for frequencies, and patient questionnaire data were analysed for content. The results of the tracking of patient-student encounters were summarised to identify key trends. Approval for this study was granted by the Human Research Ethics Committee of the University of Cape Town (REC REF 038/2011).

Results

Fourth-year students' perspectives

Fourth-year students agreed that practising clinical examination and interviewing skills, and learning how to interact with patients, were key learning outcomes in third year and prepared students for the clinical rotations in fourth year. However, finding enough patients was described as 'chaotic', 'frustrating' and 'time consuming'. Students sometimes had to pressure ward patients into being examined. Despite these challenges, students placed great value on these interactions with real patients, and felt that it outweighed the time spent finding suitable patients.

The majority of students believed that SPs have a role to play but should not replace real patient interaction, as they felt they could learn more from interviewing an 'unprepared' (real) patient. SPs were seen as most useful in second year during students' introduction to examination and history-taking skills. The ideal SPs should have clinical signs and be knowledgeable about their disease, and should not be 'artificial' or too different from a real patient. Surprisingly, students from one focus group expressed rather strongly that patients should not be made responsible for teaching, and that when patients took on an active teaching role, this created an uncomfortable shift in the power dynamic. These students believed that clinicians, not patients, should teach medical students (about a disease or condition), and many students vocalised a desire for more teaching time with clinicians.

Third-year students' perspectives

Third-year students strongly echoed the difficulty of finding suitable patients and the value of real patients, and generally agreed about the usefulness of an 'ideal' SP in some teaching situations (results in Table 1). Only 23% agreed that a knowledgeable SP could replace a clinical tutor, and some used the opportunity to praise their clinicians. Similar to the fourth-

Table 1. Third-year student questionnaire results

How would you describe your experience of interacting with the selected ward patients?	Never	Sometimes	Often		
1. I felt like I was pressurising/harassing patients, because they were not willing to speak to me	26%	72%	2%		
2. Real ward patients made a big difference in improving my history-taking and clinical examination skills	0%	6%	94%		
3. Real ward patients were extremely useful in the development of my interpersonal skills, such as approaching a patient, building rapport, and managing difficult patients	0%	12%	88%		
4. I felt like I wasted a lot of time looking for patients	36%	51%	13%		
5. There were times I felt unable to help my patient	22%	63%	15%		
6. As a 3rd-year student, I felt less valued in the wards	37%	53%	10%		
What challenges did you experience while looking for and interacting with ward patients?					
7. There weren't enough patients for all the students to see	17%	61%	22%		
8. There wasn't enough time to see all the patients	32%	45%	23%		
9. Patients were too sick or confused to speak to us	17%	81%	2%		
10. Patients were too tired to speak to us, or were sleeping	5%	81%	14%		
11. Patients were not there when we went to look for them	16%	79%	5%		
12. I couldn't understand or speak the patients' home language	29%	69%	2%		
In your opinion, what role could standardised patients (SPs)* play in the training of medical students?	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
13. Students should be able to regularly practise their clinical examination skills with SPs	2%	0%	7%	47%	45%
14. Students should be able to regularly practise their history-taking skills with SPs	2%	3%	12%	43%	40%
15. SPs should have real physical signs	2%	2%	14%	30%	52%
16. A knowledgeable SP can replace a clinical tutor to teach a particular topic	17%	30%	31%	17%	5%
17. The benefit of interacting with real patients in the wards (rather than SPs) is outweighed by the time spent and frustration of looking for suitable patients	2%	7%	16%	38%	37%
18. Even though it is an unavoidable part of medical training, I feel that repeated examinations by students infringes on patients' human rights	9%	25%	37%	21%	7%

*Definition provided: 'A standardised patient is ideally a real patient, with real physical signs, that is used repeatedly for examinations and exams with students, and will have had some training on how to present their history and give feedback to students.'

year students, many expressed a desire for more tutorial time with clinicians, with one student suggesting that patient contact time be sacrificed. Another wrote that 'a curriculum with SPs and real patients is ideal, but nothing can replace the time spent with clinicians'.

Notably, only 28% felt that repeated examinations by students infringed on patients' rights, while 74% admitted that the patients they examined were at times reluctant to see them. Many students chose to comment further on this point, either justifying their actions ('as long as they give consent') or describing their discomfort with the situation ('there is no honour in treating poor people like they are poor'). It is ironic that while most students justified repeated examination of patients, two students commented that SPs would find it a 'major inconvenience to be examined so frequently'.

Some students alluded to issues of patients' rights in their responses, and some of these related to the treatment of patients by clinicians. One student wrote that her clinician cut visiting hours short so that the students could examine the patient. 'We were hounding his bed area like hawks ... I was shocked and offended because in ... we are taught to treat our patient like a human being and yet when we are exposed to the real clinical environment, patients are treated as learning objects with no rights or feelings.'

Patients' perspectives

All the patients commented that 'students had to learn' and many said that they enjoyed the experience, as long as they were not too tired, which often was the case with repeated examinations (one patient said she saw three groups of third-year students in one day). While only one patient admitted to being pressured into seeing students, five patients were non-committal or deflected the question. Others responded that they knew that they could say no if they felt ill, and felt comfortable doing so. All patients found students to be polite, professional and kind. One patient remarked that: 'They treated me with such dignity. In fact they treated me better than my own family.' Patients generally expressed the desire to play a role in students' learning, but none commented on their rights as patients.

Patient-student encounters

Data on patient-student encounters included the number of third-year students needing to see patients (210 per week), the number of ward patients suitable for examination (110 per week), the number of times these patients were seen by third-year students (10 times per week), how often patients refused to be examined by third-year students (approximately 30 per week), and whether the selected patients had clinical signs (75%). In the context of this study, 'suitable for examination' can be defined as patients having clinical signs and not being too ill (for example, not out of breath, not too infectious, coherent). The decision on suitability is made by the Clinical Skills educators, based on their experience of what is conducive for patient-student encounters, and these educators approach patients and ask them if they are willing to be seen by students. Having patients with clinical signs is not always necessary, but definitely adds value to the students' learning, such as providing an opportunity for students to integrate skills with recognising pathologies.

The key issues that emerged from the tracking of patient-student encounters were that students often had to see patients who had minor or no clinical signs in order to complete their portfolio tasks. Common respiratory conditions such as tuberculosis were not examined because patients were too ill. Patients with clinical signs were seen multiple times by students, and since these patients were also targeted by senior students, they often refused further contact sessions. It also emerged that when asked by the educator, patients often agreed to be examined, only to send the students away when they arrived. Some patients accepted 'incentives' to see students, such as soft drinks, crisps, or magazines.

Discussion

The findings support students' claims that they struggle to find suitable patients for practising essential skills; however, it seems that their experience of interacting with real patients far outweighs the challenges. The data also confirm what we already know from the literature: that students value SP encounters[11,15] most during the early (preclinical) years, and that most patients enjoy being part of the educational process.[7] However, two unexpected issues were raised related to the curriculum's PHC orientation. These issues may highlight some of the differences between the African context and other contexts where SP research has previously been conducted. Further research may be necessary to explore these differences in more detail.

The first refers to the students' relative ambiguity about patients' rights. Due to the legacy of apartheid and the atrocities perpetuated by some health professionals, the UCT medical curriculum has a strong ideological focus on human rights in health, especially in the first two years. However, it seems that boundaries between the need to examine patients and uphold their rights may become more blurred outside of the classroom, especially when a clinician does not role model professional behaviour. Certainly, the many comments they wrote would suggest that at least students were not comfortable in these situations and the pressure put on patients. The fact that the majority of students had at times perceived their patients to be a reluctant participant seems to be excused by the recurring theme voiced by both students and patients: 'students have to learn'. These findings emphasise the need to ensure that the human rights of patients remain a key thread through the clinical years of the curriculum. Furthermore, the findings regarding the unprofessional behaviour of some clinicians highlight the reality that principles taught in theory do not always translate into the reality of a clinical situation.

The second issue refers to what Bleakley and Bligh[13] call 'traditional doctor-led medical education'. As much as they valued real patient interaction, the majority of students did not want to see patients in an active teaching role, and were in favour of more contact time with clinicians, whose time they appeared to have valued highly. This suggests that students may be in favour of this 'traditional doctor-led medical education', and that they were in support of the traditional power dynamic between patients and doctors. Bleakley and Bligh's[13] 'authentic patient-centred model' with collaborative knowledge production between student and patient is still a long way off, even in this PHC-orientated curriculum.

With clinical interviewing and examining largely being a self-directed learning activity, the experiences and perceptions of students are extremely important factors in making decisions about developing an SP programme. It is clear that SPs are not the solution for the third-year course; rather,

these findings should be used to drive efforts to extend the teaching platform outside of the tertiary setting. PHC settings could be ideal for the development of clinical interviewing and examination skills. An SP programme could be very useful to second-year students who currently have no ward or clinician time at all, providing a stepping-stone to 'real' patient interaction in third year. SPs could also be trained to provide valuable feedback to second-year students on their clinical skills at this level. However, there may be yet another, more fundamental, role for SPs that is worth exploring in an SP programme, i.e. guiding students to the place where they view interaction with patients as 'collaborative knowledge production' rather than 'practising their (clinician-taught) skills'.

This study is limited by the small sample size of patients interviewed, as well as the limited scope of the questions posed to patients. Using a trained qualitative facilitator for interviews, instead of educators, may provide more in-depth understanding of how patients attempt to balance their educational responsibility with their patient rights, and how they view their place in a government-funded health system. Exploring this aspect would be essential to the development of a PHC-orientated SP programme.

Conclusion

Rather than developing an SP programme to provide additional learning opportunities for clinical students, a programme that is aimed specifically at pre-clinical students may be more valued, and help to bridge the gap between students' pre-clinical and clinical experience. The design of the programme should also include activities that explore power relations between doctors, patients and students. Such a programme may contribute to developing a truly patient-centred approach to clinical teaching and learning, and usher in the notion of 'partners' instead of 'patients' at this institution.

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