Article

Evaluation of the Parallel Rural Community Curriculum at Flinders University, South Australia: Lessons learnt for Africa

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Abstract

Objectives. To review data collected during an evaluation of the Flinders University Parallel Rural Community Curriculum (PRCC) in order to reflect on its relevance for medical education in Africa.

Setting. The PRCC offers a community-based longitudinal curriculum as an alternative for students in their pre-final year of medical training.

Design. Individual and focus group interviews were conducted with students, staff, health service managers, preceptors and community members.

Results. Students are exposed to comprehensive, holistic, relationship-based care of patients, with a graded increase in responsibility. Students have varying experience at different sites, yet achieve the same outcomes. There is a strong partnership with the health service.

Conclusions. The principle of balancing sound education and exposure to a variety of contexts, including longitudinal community-based attachments, deserves consideration by medical educators in Africa.

For the last 100 years, international medical education has mainly been located in large academic health centres or hospitals. Clinical training in Africa has largely followed this traditional model, with students based in large central hospitals, aside from occasional forays into the community. It is conventional wisdom that all elements of clinical practice can be taught in such a context, and students are left to apply the principles learnt there to any other contexts in which they may work.

Internationally there has been a move to more community-based training to ensure appropriate training as well as to address workforce issues. One such example, the Parallel Rural Clinical Curriculum (PRCC), was initiated in the Riverland region of South Australia in 1997 by the Flinders University School of Medicine. Students spend the entire year 3 (pre-final year) in general practices and regional or district hospitals, being supervised by general practitioners, with gaps being filled by local and visiting specialists.

The purpose of this article is to share lessons from a case study of the Flinders University PRCC. Data for this article were collected as part of an external evaluation of the PRCC, conducted in 2006.[1]

Design

The qualitative component of the evaluation, used for this report, involved focus groups and individual interviews conducted by an external evaluator (IC). A standard question was posed, viz. 'What is your experience of Year 3?' Follow-up questions covered educational and social advantages and disadvantages of the programme, outcomes and achievements, and recommended changes.

Focus group discussions were held with students at four sites, viz. Flinders Medical Centre (FMC) – the major academic tertiary hospital in Adelaide – and the three PRCC sites operational in 2006 (Riverland, Greater Green Triangle and Hills Mallee Fleurieu). Individual in-depth interviews were conducted with staff at each of the sites, faculty leadership, key informants in the health services and community members.

Interviews were recorded and transcribed. After anonymisation, transcriptions were imported into N-VIVO 7 and analysed by coding data according to emerging themes.

The research protocol was approved by the relevant ethics committees of the University of the Witwatersrand and Flinders University.

Results

Individual interviews were conducted with 87 people, representing a range of stakeholders linked to Year 3 (Table I). There were six focus group discussions which included 45 students.

The results presented below are grouped under the axes of the Flinders symbiotic model[2] of clinical education in relation to four questions.

1. Clinicians and patients: How to ensure that we train healers and not only technicians

Students in the PRCC were very positive about their experience in terms of what they learnt about people and not only about medicine. Through exposure to GPs, specialists and other health workers, to hospital and community-based care, and to the range of patient presentations and needs, from minor to major, curative to preventive, rehabilitative or palliative, PRCC students experience and come to understand comprehensive and holistic care. In contrast, at FMC there is a rapid turnover of patients and difficulties in finding suitable patients for students.

A key element of the PRCC is the focus on the undifferentiated patient as the basis for learning and the integration that happens through

Table I. Summary of interviewees

Group	Category	Total
University-based staff	Faculty leadership	6
	Academics (non-clinical)	9
Clinicians	Academic co-ordinators (departmental or site based)	8
	GPs	19
	Other specialists	6
	Other hospital staff, e.g. clinical nurses	5
Managers	Health service bureaucrats	8
	Practice managers	5
	Hospital managers (CEOs, directors of nursing, etc.)	7
Academic support staff	Administrators	10
Community/local government representatives		4
Total		87

this process. 'The physician says go see this patient. We don't know if that's going to involve a cardio-type problem, a respiratory-type problem or a neurological type problem so we have to be ready for anything. And then when he questions us we're not just in a medicine block, or just in an O&G block, we have to consider the whole range.'

The relationship between students and patients is a mutual one. Practice managers and GPs alike reported that patients enjoy students, take pleasure in being able to be part of teaching them, and appreciate the greater attention and longer consultations that students offer.

2. Health service and university: How to develop learning cultures in smaller health services

Flinders offers a model of using all available local resources to educate students, based on an understanding of 'many roads' leading to one destination.

The University has forged strong partnerships with the health service. There is a common understanding of the need for educational and service components within health care to work together.

A commonly held belief among students was that those at other sites must be better off – 'the grass is always greener no matter where you are'. This highlights the fact that all sites were seen to have strengths and weaknesses, and are suited to different students, which was cited as a reason to use multiple sites.

The university's involvement in PRCC sites has a significant impact. GPs spoke of the stimulation offered by their role as teachers, which has given 'new meaning' to their practice. It promotes quality of care and evidence-based practice. General practices appreciate their relationship with the university and with the students, taking great pride in being part of the academic endeavour and helping to train the future generation of doctors. There is a sense of purpose in being an 'academic practice'.

The local hospitals too were highly appreciative of the programme. A strong benefit of having students is seen to be the learning culture which has developed in these hospitals. By having students, the local health service is supported and developed.

3. Government and community: How to make an impact on the workforce needs of all communities

At the PRCC sites, the buy-in from partners (faculty, GPs, health service, local government, politicians) is impressive. There is a clear recognition of a common vision – to address workforce shortages in rural Australia and to provide a good educational experience for students. Stakeholders outside of the university have bought into the vision, adopted it as their own, support it – even financially in the case of some local governments – and are ready to defend it against threat.

There is a feeling too within the Flinders and broader community that the PRCC has had a very positive effect in terms of improving attitudes towards rural practice.

The PRCC alone cannot solve the workforce problems. Student selection was mentioned as an important issue, and it became clear that the PRCC was most successful at sites, such as the Greater Green Triangle, where postgraduate training opportunities also existed.

4. Personal principles and professional expectations: How to instil values such as responsibility and teamwork in students

Students expressed the need for mentoring. FMC was reported by some as an unfriendly, unsupportive environment. In contrast, the PRCC uses an apprenticeship model of training; students are individually mentored, guided and coached through the year, providing them with opportunities for personal growth in addition to educational development and ensuring that they acquire good clinical skills.

Concerns were raised about some of the role modelling that occurs at FMC, and whether enough emphasis is placed on teamwork and functioning co-operatively in a health care system. 'Are we producing doctors who actually consider themselves to be integral parts of teams rather than independent practitioners?' In the PRCC, students become integral and valued members of the professional team.

In addition, PRCC students are given graded responsibility, so that, instead of simply observing processes, or 'clerking patients' for learning purposes, they become responsible for the care of patients over time under supervision, which is an important learning experience. Students are not just observers, but contribute directly to patient care.

Conclusions

The Flinders PRCC programme offers a model for ensuring that students see their patients holistically, caring for them as people rather than simply being expert technicians, a perspective recognised to be critical in a number of guidelines on medical education internationally.[3-5] The key ingredients of this are the continuity of relationship, both with doctors and other health care staff and also with patients, afforded by a longitudinal exposure in a community setting. Integration of knowledge happens through practice and under the guidance of mentors. This is achievable in an African context, even if the model might look very different, using, e.g. clinics, health centres and district hospitals, and not only private GPs.

The Flinders Year 3 programme runs counter to the conveyor belt approach to medical education, offering a smorgasbord of opportunities for students. This allows the medical school to use every available health service resource and the students to explore their interests, select options appropriate to their learning styles and develop in their own ways, while still meeting a common goal. The final common exit examination pro-

vides a standard that all must reach. Research has shown that students in the PRCC generally perform better than their peers in this exit examination.[6]

The assertion of one respondent that students deserve good education regardless of site may seem self-evident. What is interesting is that this was applied to the tertiary centre. As these centres change, becoming more acute in their focus and more high-tech as opposed to high-touch, their suitability as training sites for students must be re-considered. There are many educational experiences on which students can potentially miss out as the nature of tertiary centres changes, such as chronic care, ongoing care, continuity, first-contact care, exposure to common conditions, and contact with undifferentiated and ambulatory patients.

The aim of Flinders is that students are enabled 'to undertake further training for any branch of medicine'. This should be true of all medical education. It is important to examine the training in Africa to ascertain whether or not that is the case – whether students are indeed properly equipped, e.g. for rural and generalist practice, or mainly for specialised hospital practice.

The Flinders programme has had success in aligning the goals of the teaching institution and of the service in a common understanding of the role of both in developing a future workforce. Working to obtain greater alignment between these two would make a difference in Africa. We should be aligning not only with the tertiary sector, but even more so with the district hospital network.

The role that medical education can play in peripheral, 'non-academic' health services cannot be over-emphasised. One of the arguments against training outside the walls of the tertiary institution has often been a concern about standards of care. While it may be argued that there already existed high-quality care in the rural areas chosen by Flinders, it is clear that the presence of students and academics in these areas led to the development of a learning culture, stimulation of doctors and a general improvement in the quality of care provided, and validated them as legitimate places to work. This is surely also part of the mandate of the training institutions in Africa – to improve quality of care through academic involvement, rather than ensuring that poor standards of care continue by eschewing involvement.

Flinders has developed a model, replicated in a number of other faculties in Australia and around the world, that offers sound education while exposing students to a range of different contexts. While the resources in Africa may be different, the principles nevertheless still demand consideration.

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