Chapter 1.2.2

BALANCING MEDICAL EDUCATION AND THE NEEDS OF THE RURAL HEALTH SERVICE

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Introduction

There is often tension between medical students' needs for education and the health service's needs for health care provision to continue without interruption. Practice- or service-based teaching is an important way of bringing these closer together, but there are risks inherent in this. On the one hand, students may be seen as workhorses to provide service and to allow more patients to be seen. On the other hand the demands of students for supervision and mentoring may cause frustration and impatience on the part of health care service. It is important that these are held in balance.

Worley (1) has provided a model within which to view this tension, as part of a number of critical relationships which need to function together in symbiosis - symbiosis being a mutually beneficial partnership between persons, organisations or concepts of different kinds (2). One such partnership is the university-student-health service relationship. These partnerships need to be managed carefully within an understanding of service learning, where students are expected both to provide direct service to a community as well as to learn about the context of the service, the connection between this service and their academic outcomes and their responsibilities as citizens (3). Service learning is really about a balance between the goals of the faculty and those of the service.

The tension between a student's educational goals and the service goals of the health care facility can be instructive for students if they see themselves as part of the solution (3). Conversely the tension can be very negative if students see themselves as unwelcome and part of the problem (4). There is a need to address this tension within rural medical education programmes, particularly because rural health services are often more vulnerable to small changes. Ways need to be found to ensure that the goals of both parties are being addressed, as this will strengthen the relationship.

Creating symbiosis

It is thus important to look at structuring educational processes and content to maximise the benefit for the local health service. This may involve, for example, structuring the way that clinical patient care is offered to ensure that students both receive adequate supervision and assist the load of mentoring physicians.

General practitioners have described many ways in which precepting students have added value to what they do (5). Furthermore, opportunities for building in specific activities which can enhance the contribution of students to the health service should be sought. For example, students in the final year integrated primary care rotation at the University of the Witwatersrand (South Africa), who spend six weeks in primary care sites, are required to do a health facility audit and a quality improvement project. These projects are implemented by working together with local health care teams, and are presented to local managers who can benefit from using the report to improve the facility.

Medical students can play an important role in facilitating multi-disciplinary teamwork in the management of patients. For example, students who are required to do a case report on a patient requiring rehabilitation, can present the case to the team of doctor, nurses, physio- and occupational therapists, community health workers, etc, at which time practical patient management decisions are taken. This can be applied to a range of different patients. In this way, student deliverables prompt the rest of the team to do what they should be doing anyway. This approach proved to be invaluable in energising the multi-disciplinary team at the remote Madwaleni Hospital in the Eastern Cape province of South Africa (Dr Richard Cooke, personal communication).

The impact can and should be greater than such specific contributions, however. Ideally, the presence of students should assist in transforming the health service so that a learning culture is adopted. Involving a range of local health service providers in the teaching of students, and developing seminars for students which are open to the local health care team, can foster a culture of learning amongst the local health service staff (6, 7). In other words the presence of an academic programme can assist to transform the health service into a learning organisation.

Ideally, the local health service needs to reach the point where the presence of students is seen to be essential for its future. When this happens, managers have realised that their future human resource solutions will come from their involvement with students, and they thus commit themselves fully to supporting the academic programme.

In an example of this, health service managers in sites in South Australia that are used by the Parallel Rural Community Curriculum of Flinders University describe how they see the presence of students within their facilities for a year as very positive for two reasons. Firstly they understand the training of students to be essential for the future of the health service, in terms of workforce issues; but secondly the presence of the students has transformed their facilities into learning organisations, affecting the entire health care team(6).[1]

What's the evidence?

There is evidence that the presence of medical students can both improve the clinical services offered (8), and increase patient satisfaction (9). Preceptors[2] indicate that the presence of students improves clinical practice (10).

In a series of articles, Walters and colleagues have shown that, in terms of individual service providers, there is a range of benefits from having students in the health service. These include variety from routine consulting; intellectual stimulation; personal learning; perception of themselves as teachers and clinicians; the sense of giving back and future recruitment; and that, through the central role of the doctor-student relationship, reciprocity between medical student learning and patient care develops (5, 11-13). When the triangular relationship among doctor, patient and student is functioning at its best, students progress from being largely passive, to competing with the patient for the doctor's attention, to finally meeting their own needs through the delivery of patient care (5).

In a general practice setting, patients report that, when consulting with students, they learn more and have more time to talk (14, 15).

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1 Note that this implies a decentralisation of decision-making to the local health service.

2 A preceptor - or clinical instructor/adjunct faculty – is a clinician (person with core clinical skills) who offers clinical teaching at a distant (rural) site.

An illustrative anecdote

Students in the final year integrated primary care rotation at the University of the Witwatersrand, who spend six weeks in primary care sites, were placed in Taung Hospital, a remote rural district (level 1) hospital about four and a half hours from Johannesburg, South Africa.

As part of this rotation and as mentioned above, students are required to do a health facility audit on one aspect of the facility, followed by a quality improvement project. The local management saw this as a golden opportunity, and requested each group of students to tackle a separate part of the hospital – the outpatients' department; the maternity unit; the female ward, etc. At the same time the management committed themselves to assisting with resources for the quality improvement activities that arose from these. As a result, for example, signboards were put up in the hospital, benches were acquired for patients waiting in the antenatal clinic, etc. The hospital team looked forward to each new group of students arriving because of what they would be working on.

In another example from the same programme, successive groups of students took on the task of training hospital workers - from health professionals to cleaners - in basic cardiopulmonary resuscitation, until all staff had been trained.

Broader applicability

These principles do not apply to medical students only. Ideally the whole health care team should be involved, both in terms of the range of students who are placed in facilities and in terms of the members of the local health care service who are involved in teaching.

Practice pearls

- Students must make a contribution to service in rural practice. They must be seen as a benefit rather than a burden.
- Students can be effective change agents, through the effective use of collaborative quality improvement projects, health facility audits, providing up-to-date guidelines, sharing resources, etc.

- The involvement of a university should transform a local health service into a learning culture, impact positively on the community and instil pride in the health care team.
- Long-term buy-in of the health service may be determined by the perceived workforce impact.

What not to do

- Don't take the health service for granted.
- Don't base an academic programme around one person in a local health service – it needs to become institutionalised.
- Don't let students be separate agents – the more integrated they are, the more buy-in there is from the health service and the more students benefit.
- Don't let the local health care team feel they are just being used (and thus abused); even in the absence of financial incentives, there are many ways to make them feel appreciated – certificates, gifts, honorary lectureships, letters of commendation from the dean, invitations to faculty functions, signage for sites to recognise them as a teaching facilities, etc.

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