4.3.2

SHORT-TERM RURAL PLACEMENTS FOR MEDICAL STUDENTS

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Introduction

Medical students frequently derive substantial educational value from well-supervised rural clinical rotations (1). While the optimum duration of the rural exposure during undergraduate studies is not known, short-term placements vary from four weeks up to 16 weeks - longer than this would then probably be defined as a longitudinal placement.

Placements may be compulsory or elective. The availability of locally-based mentors and supervisors is a critical component of such rotations (2) – particularly if they are passionate and dedicated.

Short-term placements fall somewhere along the continuum of rural medical education measures. While they may represent an example of the least intense exposure on this continuum (see Table 1 below), their influence on students' attitudes towards rural health and rural practice can be increased if they are integrated with a number of other interventions. Where they stand alone, and represent a small percentage of the overall curriculum, they are unlikely to have an impact on student behaviour and career outcomes, but may still have an important role to play in terms of educational objectives, because rural placements often provide enhanced clinical and professional training opportunities.

Successful programmes are usually orientated towards teaching primary care/general practice/family medicine. They integrate clinical and public health concerns, use problem-solving and community-based teaching methods, and acknowledge the importance of adapting teaching to the context of the learning site, including local health priorities and the culture of the local community (2, 4). Regardless of the contents, most programmes have an objective of providing a high quality educational and clinical experience.

Table 1:
The two extremes of the rural placement continuum
(taken from Doherty (3))

Most intense exposure	Least intense exposure
Students are introduced early to rural environments	Rural placement happens towards end of programme
Rural placements occur at periodic moments throughout the programme	Only one rural placement
The main rural placement is long (six months or more)	Rural placement is short (a few weeks)
Students are attached to individual health professionals who act as mentors	Students are not assigned rural mentors

One of the most significant aspects of rural placements for most students is the opportunity to learn and/or practice procedures. They often have the chance to do more than they would in an urban setting, for a variety of reasons. It is thus important to ensure that good practice is being demonstrated, and, especially in under-resourced settings, that equipment and supply shortages do not impact negatively on the procedures done, both in terms of quantity and quality. Academic institutions may even consider supporting the purchase of basic supplies for students to use, such as gloves or protective wear, in order to enhance their experience and not place a burden on the rural site.

As rural areas are, in most cases, resource-poor and thus often under-staffed, the programmes must include ways to ensure buy-in from local staff and to enhance the motivations of health professionals and management so that they continue to welcome the students and, where possible, to share their personal and professional lives with them. The personal touch is something students always appreciate in rural placements.

What's the evidence?

There is no clear evidence about what length of placement makes a difference. However, there is evidence that education is a critical factor in recruitment and retention, and much of this evidence is based on placements as short as four to six weeks (5). Certainly, a case-control study in South Africa provided evidence that rural exposure influences the choice of practice site by doctors, in a developing country context, but the precise curricular elements that have the most effect need further research (6). These results are similar to those found in Australia (7). In contrast, however, a study in Canada (8) found no significant difference between physicians[1] exposed to rural practice during undergraduate training and those who were not, in respect of their choice of a rural practice location.

The major question, then, is really the purpose of the rotation: whether it is educational (to improve the competencies of medical students) or occupational (to increase the possibility of future rural practice amongst students).

It is clear however that rural placements can drive students away from rural practice, particularly if the placement is not well organised and there is poor clinical and personal support for students (9, 10). Creating a good environment is frequently cited as being important, with good accommodation being a priority (11, 12), but also including adequate teaching spaces (13), group tutorials and internet access (14). Reimbursement of travel costs, and accommodation costs if this is not provided, help to encourage positive attitudes towards rural placements and mitigate the impact on students' financial well-being (15).

An illustrative anecdote

When I started in my position as Professor of Rural Health at the University of the Witwatersrand, I become very involved in the development and rollout of a new four-year Graduate Entry Medical Programme (GEMP) curriculum. When the decision was made to have a two-week elective at the end of GEMP 1, I was not interested in getting involved as I felt two weeks was not worth my effort and the students did not know enough at that stage.

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[1] A 'physician' here (and in North America generally) is another term for 'doctor' or general practitioner, while in countries like South Africa and Australia, a 'physician' is a specialist in internal medicine.

In 2003 five students approached me to do rural electives and I agreed to be their 'internal supervisor'. Reading their reports changed my attitude to the elective. For all of them the two weeks not only provided critical exposure to rural health care, but it also provided them with an opportunity to put into practice what they had learned through the year, and renewed their inspiration for medicine as a career. As a result I decided to become actively involved in the elective process.

By 2010, an average of 60 students per year were signing up for rural electives. Reviewing their reports showed that these same themes arise consistently in their experiences. To quote from a few of these reports:

> "My visit to [a hospital] really taught me more than factual knowledge. It exposed me to the lives of my future patients and the context in which they live. Seeing it for myself provided a valuable foundation when understanding patients in the South African context … I was exposed to such a wide range of medical and social knowledge and was able to put the theory I have learned into practice."

> "I feel I have experienced situations that have enriched me as a person, provided me with valuable insight for the future. I now partially understand the elation and despair that doctors in such a setting experience from day to day… After this rural experience I am excited at the thought of possibly being able to do my community service in a similar setting… The experience for me has been an eye opener and one that I will never forget."

This short-term placement – an elective one – has shown me that, given the right students with the right motivation and positive experience, even a brief encounter can be beneficial. However, without other reinforcing factors, it is recognised this is unlikely to impact on their future careers. (Many of these same students often 'go rural' during a second elective in GEMP 3 and a compulsory six-week primary care rotation in GEMP 4.)

Broader applicability

Short-term undergraduate placements provide an important opportunity to expose students to different situations and role models. They also may be an encouragement to local health professionals and health facilities.

To have broader impact both educationally and in terms of career outcomes, they need to be part of a range of interventions.

Practice pearls

- If the rural exposure is very short (one to two weeks), limit the objectives; aim for depth of experience and exposure to rurality, rather than breadth.
- Offer short-term exposure early on in the curriculum, as an appetizer for later practice; longer placements (four weeks or more) should occur when students are more clinically skilled.
- Aim for ensuring some rural exposure for all students, and longer and/or repeated exposure for selected students.
- Ensure the exposure is as hands-on and clinical as possible: this is what most medical students are interested in.
- Allow them to contribute – and feel they are contributing – as part of the team, according to their level of experience; even junior medical students can be involved in well-baby clinics, doing screening or giving immunisations, or in health promotion activities, etc.
- Students must be given adequate space to work in and to see patients, and not feel that they are taking someone else's place to do so.
- Ensure good site orientation.
- Offer choice as much as possible.
- Offer a variety of elective opportunities.
- Good accommodation is always a major positive factor.
- Whatever you do, make sure that the students have a good time, so that they leave feeling warm and fuzzy about rural health!

What not to do

- Avoid burnt-out supervisors or settings where there are particularly intractable problems. Don't turn students off rural health!
- Do not force students who are set against rural practice to go for anything longer than two weeks: it seldom changes their minds, and they become a burden to the local health facility.
- Avoid cycling students too quickly and too often through rural sites, which increases the chances of site fatigue i.e. local supervisors and other health professionals becoming tired of hosting students.
- Avoid tourism i.e. avoid letting students feel they are simply there to look around and observe what is going on. Ensure they get hands-on involvement in local activities and/or practice.

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