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ORIGINAL RESEARCH

Reported reasons of medical students for choosing a clinical longitudinal integrated clerkship in an Australian rural clinical school

H Denz-Penhey[1], JC Murdoch[2]

[1]*The Rural Clinical School of Western Australia, Perth, Western Australia, Australia*

[2]*The Rural Clinical School of Western Australia, St John of God Medical Centre, Bunbury, Western Australia, Australia*

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ABSTRACT

Introduction: With the expectation that students educated in a rural setting will be likely to return to practise in a rural area after graduation, the Rural Clinical School of Western Australia (RCSWA) focuses on long-term placements in rural areas during students' clinical training. Objective: to identify why students chose to come to RCSWA. Setting: each of the 10 rural and remote sites in the RCSWA office.

Methods: All students in 2006 and 2007 attending the RCSWA who were available for the mid-year evaluation interviews participated (n = 98). A qualitative thematic analysis of individual interviews was undertaken and emerging themes were compared, with the 2006 data used as a basis to consider the data from 2007.

Results: Three major reasons for coming to RCSWA were identified, with most students giving more than one reason. Over 80% of the students reported that they expected to receive broader and better clinical and academic learning opportunities in the rural setting. Three-quarters of the students chose the RCS in order to have the chance to have a year experiencing rural life. One-third of the students came for personal development and increased life experience. The reasons for coming were often multidimensional. Students also articulated reasons for not coming which they considered prior to accepting the position in the RCSWA. In addition,

they gave examples of why their decision to come had been a good one, in terms of opportunities for clinical learning and their other identified reasons.

Conclusion: Students reported they perceived an academic year spent in a rural area to be so overwhelmingly positive that they were prepared to give up everything the city has to offer and go to a different, often challenging environment in order to participate.

Key words: clinical clerkships, curriculum delivery, graduate training, medical education, undergraduate training.

Introduction

In response to concerns about the rural health workforce shortage, the Australian Government has funded rural clinical schools (RCSs), which focus on long-term placements in rural areas during students' clinical training. One of the federal government's expectations of this initiative is that students educated in a rural setting will be more likely to return to practise in a rural community after graduation. Some Australian RCSs have experienced difficulty in recruiting students, whose concerns relate to anxiety about academic standards, the lack of rural specialists, a lack of subspecialties, family and partner issues and financial issues[1]. The experience at the Rural Clinical School of Western Australia (RCSWA), which has taken students from the University of Western Australia (UWA) since 2002 and from the University of Notre Dame Australia since 2007, has been that students want to come to a rural area and every intake has been filled by volunteers. For instance, in the year 2006 there were 41 applications for 37 positions. In the last 2 years (2007 and 2008), more than 100 students have applied for 60 and 67 positions, respectively. It therefore seemed worthwhile to investigate the factors that made this recruitment a positive experience. It is important to note that students who do not wish to apply for the RCSWA, or who are not accepted, attend metropolitan tertiary-based training because there are currently only two available alternatives for this clinical year.

Methods

All RCSWA students have been interviewed in May–June every year as part of the ongoing evaluation of the school by the first author. The questions are open ended, and the first question asked in 2006 and 2007 was about their reasons for choosing to 'go rural' for their clinical year: 'What brought you into the RCS and what pros and cons did you consider prior to accepting the position?'

A qualitative thematic analysis was undertaken using constant comparative methods[2,3] whereby each quotation was compared with quotations both from the wider interview and from other students. The full method has been described elsewhere[4]. Emerging themes were compared for concurrence, variance and redundancy. Themes from the 2006 year were used as a basis to consider the data from 2007. In 2006 all 38 students were from UWA. In 2007 the RCSWA had its first year of a joint curriculum with students from both UWA (n = 42) and the University of Notre Dame (20).

Results

All but two students were interviewed (98 out of 100). Students all provided more than one reason for the decision to come to the RCS, with some providing short responses and others going into detail. Each quotation provided comes from a different student.

Three major reasons were identified: (i) the expectation of better learning opportunities in a rural area than in the city; (ii) students were drawn to the rural area; (iii) and they saw the year as an opportunity for personal development and increased life experience. Reasons for not wanting to come included the fear of isolation or separation from partners, family and friends; and concerns about fewer specialists, fewer specialist cases and fewer patients overall.

Better learning opportunities

Students overwhelmingly reported that they expected to receive broader and better clinical and academic learning opportunities, with 83 students mentioning some aspect of this theme. They expected more interesting cases and a better clinical experience in the rural area (n = 45); a broader clinical experience that was different, because rural medicine was different from city medicine (20); a more 'hands-on' learning opportunity (27); and more one-on-one teaching with clinicians (16), with smaller numbers meaning fewer students per patient and per teacher, small group teaching, a more desirable teaching style that allowed for patient continuity of care and follow up, and they wanted to 'do more'.

> *…more hands on, getting a more holistic view of how health works, I found in the city you'd be attached to one team so if you were on respiratory team all you know is that, you didn't know how the whole hospital system worked.*

> *Another pro was the idea of getting a wider more holistic, in terms of having the experience in ED* [the emergency department], *the ward, following patients through, the variety of presentations, which is difficult in the city, particularly if you are not doing an ED rotation.*

> *I knew I would like working with GPs, living in the country, space, more autonomy, not being stuck in a tertiary hospital.*

Some 25 students offered as part of the reason for attending, the fact that they had spoken with previous students or medical family members who encouraged them because of the excellent experiences. Two students said they had compared 6th year rural students and seen a difference between them and their city counterparts.

> *The idea of having more meaningful clinical experience, … and from what I've heard from previous students, you have the opportunity to know staff a bit better and have more of a meaningful relationship with hospital staff, and patients.*

> *I had seen a few past students and I was quite impressed by how they conducted themselves and their knowledge, I thought they showed great maturity.*

Drawn to the country

The second cluster of reasons for coming to the country related to students being drawn to the rural area (n = 74). In total, 65 wanted a year in a rural area for various personal reasons; 27 mentioned they expected to practise in a rural area in the future; 22 wanted to experience rural life and live and work in a rural area; while 17 were using the opportunity as a 'rural immersion trial with support' prior to their graduation. In addition, 20 students mentioned they wanted to experience Aboriginal or rural and remote medicine. Some were from a rural area, missed it and wanted to get back there, while others just wanted to get away from the big city, have a change in lifestyle, get to know what 'country' was about and to learn about 'being rural'. The RCSWA was a way of doing that while still achieving their academic goals.

> *I really looked forward to getting out of the city for a year, I had been considering taking a year off to get out of the city. Wanting to spend time in a rural area, I've grown up in the city … get experience of a wider Australia, a really good thing to go out.*

I have been a city person but have thought about working rurally, so thought it was an opportunity to try it out, see how rural stuff went.

Personal development and increased life experience

In all, 33 students mentioned reasons for coming to the RCS that included personal development and increasing their life experience; 11 specifically called it personal development; five wanted to develop self-confidence; and another five saw it as an opportunity to leave home.

I wanted to gain independence, learn to live with other people, stuff like that.

I thought it would be an experience, maybe more individual development, confidence and skills.

Unexpected findings

Only 10 students mentioned the incentives of an allowance, free accommodation and the various benefits as being a reason for coming to the RCS.

Negatives

Students were specifically asked what negative factors they considered prior to applying for and accepting their position in the RCS. As mentioned, some 25 were concerned about a lack of specialists. A slightly smaller number, 23 overall, mentioned relationships. They thought about leaving spouses and long-term partners (n = 10), family (15) and friends (20), and two students wondered if they could cope if their long-term relationship failed due to the strain of being away (one did and the other did not). Some 12 students wondered who they would be living with and whether living with people they had not lived with before would cause problems. Six had never lived out of home before and wondered how they would cope, six were concerned about living in such isolated places, while eight wondered if the rural social life was going to be satisfactory. In the 2007 cohort, with one-third of the students mature graduates, five students were concerned about the expense of moving their families into a rural area and whether their children would settle into the new environment.

Being [2000 km] *away from Perth, it is so far away, not like you can drive home, even Kalgoorlie you can do a 8 hour drive and get home. Every time if I need to get home it's $500 return, so the isolation was a big one – and fitting into a small town.*

I didn't think of too many cons, apart from my [long-term] *partner in Perth and my dog so that made it a bit more of a decision, but my partner is very supportive and he knew it was something I wanted to do.*

Multidimensionality

The decision to come to the RCS was obviously multidimensional for most students.

[Medicine is a] *6 year degree and a lot of time to spend in one place, and I was looking forward to a life change, meeting new people and new experiences. Always felt strongly towards the country. My dad was a GP in* [a rural area] *for quite a number of years, as the only doctor in town, did a lot of procedural stuff that he talks very fondly of, the benefits of country practice. I do like the fact the doctors here are so multidimensional, doing obstetrics and anaesthetics as well as GP, or surgery which if I was going to do GP would be something I would do, just fun and something new.*

In addition, the majority of students reported that their reasons for coming had been justified by their experience. Although not specifically asked about, half the students volunteered this information in their free responses to the open-ended questions. They responded that they did indeed receive excellent opportunities to see and have hands-on experience in a sufficient variety of presentations to more

than meet their course requirements. They participated in the care of patients presenting with the full range of illness and trauma, including motor vehicle accidents; major lacerations through important muscle groups to bone; stabilisation of patients for transfer; surgery of various kinds; and the vagaries of clinical and emergency department presentations. Additionally, students frequently reported on unusual cases they had dealt with, such as alkaptonuria (differential diagnosis by the student), paroxysmal nocturnal haemoglobinuria, Hansen's disease and tertiary syphilis, in addition to the very complex cases of diabetes with advanced renal failure that are so common in certain rural areas.

> *What you would expect, not much specialist teaching, a bit haphazard with what we get exposed to, not much paediatrics, but we will no doubt meet the outcomes for the year, and it's made up for in other areas. I have had a lot more clinical contact this year so I have a lot more cases to work off, most days I have something pretty cool. End-stage of life ones have been good, births, complicated ones have been awesome. Deaths have been worthwhile to be at, its part of being a doctor and to get exposed to it in a way I can't imagine being able to be exposed to in a metropolitan area. Even basic mundane GP stuff, I get a kick out of that, if someone has niggle or a problem you can help with, I get a whole lot of that here.*

> *Gen med is crazy, no way you could get this kind of gen med in the city. Opportunities like I got last night when I got to assist in an emergency scenario was pretty cool stuff. To get to go in emergency in 5th year is amazing cos you really do learn the core stuff we have to learn, history taking, examination, management, the stuff we are focussing on this year is, if you go to emergency you really learn it very quickly so, whereas if you are just doing different musculo-skeletal whatever you don't get chucked in the deep end at all, you don't have to think too much, you just learn what you are learning at the time, but if you are in emergency you get all of it once and you really have to adapt and upskill pretty quickly so that's really good. Lots of clinical skills as well, lots of cannulas, I've put in 3 times as many as last year already this year and being able to put them in an emergency situation as well, which is good.*

Discussion

It could be perceived that the authors had on 'rose-tinted spectacles' when writing this article; however, we would refer readers to other articles that articulate critical aspects of the regular evaluations undertaken by the RCSWA[4-6]. These findings are similar to a recent article describing rural and remote training in Scotland[7].

An important difference between this study and that of Jones et al[1], which was different from the present findings, is that this was a qualitative interview study of RCS students using open-ended questions, whereas theirs was a quantitative questionnaire-based study of all medical students with a 51% response rate. It is not surprising, therefore, that there are differences in the responses. In addition, the Melbourne study described the perceptions of the student body as a whole, while the present study describes the personal experience of those selected. None of the RCSWA students expressed concern about not obtaining a preferred internship – the main concern expressed by Jones and de Witt[1]. Commitments to housing and mortgages in the city were not mentioned by any student as a concern when they decided to take up their placement, although this may have been an issue and a contributing reason to why 10 students left partners behind in the city. Religious, social, sporting or music commitments were not mentioned as important issues by any students.

One of the limitations of this study is that results from this study cannot be generalised to other RCSs in Australia, or to other parts of the world, because they are specific to one school with a particular approach to teaching and curriculum delivery[4,8]. However this is the case with any context-dependent qualitative study. The important issue identified is that students can perceive a rural academic year as so overwhelmingly positive that they are prepared to give up

everything the city has to offer and go to a different, often challenging environment in order to participate.

A further perceived limitation could be a positive bias due to the writers' academic positions. The findings were replicated across more than one year and should be read alongside other more critical findings[4-6].

Almost all students are driven by the desire to achieve and the majority would not be prepared to come to an RCS unless it had been shown that students performed at least as well as their city trained counterparts. This has been shown in rural streams in Australia and elsewhere[9-13] and also in longitudinal clerkships in primary care[14]. In addition, students stay very much connected to their city counterparts by way of the internet and mobile telephone. As a result they are able to compare their experiences, not only with their previous clinical experiences, but also with the experiences their city colleagues report to them.

The fact that our rurally trained students have done as well as the metropolitan trained students illustrates the fact that students can be taught to be generalists and still meet the requisite standards. In the RCSWA, students are taught by generalists between 60% and 100% of the time, depending on the site and the number of specialists in the district. As students move through their graduation and into intern and later postgraduate years, it would seem that generalists continue to provide at least a satisfactory education. Ideally, a vertically integrated, properly resourced teaching and learning environment such as this could be raised to one of excellence. Our experience has been that if the teaching and learning is good enough, many students will sacrifice a great deal to be in a rural area, as is shown by the fact that 10 students temporarily left long-term relationships, another 10 took their families with them, leaving established homes for rural living for a year. In addition, our northern Australian students are living and working in conditions of high temperatures (over 40°C, or 100°F, for months at a time), high dust and months of humidity of over 90%. This should be compared with living in a city with the conveniences of café living and other social conveniences such as good shopping and night clubs.

Some people believe that 'all the interesting cases get shipped off to the city' and therefore students and junior doctors will not get sufficient experience of unusual, serious or complex presentations and cases. The RCSWA experience was that this was not the case, as reported by the students in this study and also evidenced by the comprehensive case notes students must submit to their teachers throughout the year. This factor augers well for the expected influx of newly graduated practitioners who may choose to or need to gain their early postgraduate experience in a rural area. With a reducing rural population there will be fewer cases overall; however, 6 years of student case notes indicate there is a more than sufficient range of conditions to meet students' examination requirements, including the odd, the rare and the intellectually stimulating. In addition, a little recognised component of the rural experience is the lack of competition for cases due to lower numbers of students.

This qualitative study probably underestimates the importance of other factors, such as financial incentives to go to a rural area. While this study indicated that incentives do not necessarily bring students, a lack of incentives would surely reduce the attractiveness of rural experience. If students had to pay the full cost of accommodation to go to remote sites (AU$200–600 per student per week), a decline in applications to RCSWA could be expected.

However the generous funding of RCSs has not only provided incentives such as free accommodation, travel and allowances to the student body, but also has permitted the development of a rural educational infrastructure that has a reputation for excellent clinical programs. The authors believe that the level of funding available enables two important motivating factors for students: comfortable accommodation, and an appropriate clinical supervision structure through the appointment and retention of resident medical staff.

The conclusions of our students seem to support the view proposed by Hirsch and colleagues[15] that longitudinal clerkships provide the setting whereby:

> *Students and longitudinal preceptors share the professional intimacy of dual responsibility for patient care. Such relationships, in which faculty members have personal responsibility for overseeing their own students, provide students with the emotional comfort to take intellectual risks in their learning. At the same time, trusting relationships and shared goals foster coaching, promote effective feedback, and enhance clinical performance.*

While the experience of our students seems different from the perceptions of those in the Melbourne study[1], they are similar to the Aberdeen study[8] and this indicates the need for more qualitative research of student experiences of rural and urban longitudinal clerkships. The source of the perceptions is not difficult to find. A series of reviews by Irby and colleagues[16,17] has looked for evidence of the effectiveness of ambulatory and longitudinal clerkships. The earlier study suggested that education in ambulatory care clinics was characterized by:

> *…variability, unpredictability, immediacy, and lack of continuity. Learners often see a narrow range of patient problems in a single clinic and experience limited continuity of care. Few cases are discussed with attending physicians and even fewer are examined by them.*

The more recent review failed to confirm these findings but indicated that there was a paucity of valid studies which demonstrated the benefits of the process.

In our setting, the decision by the government to fund RCSs came as a result of concerns for the future rural workforce. The Melbourne study[1] was in response to fewer than 25% of students volunteering. Over the ensuing years most medical schools in Australia have seen an increasing proportion of students electing to come to their RCS, which would seem to suggest that personal reported experiences are more powerful than student and staff perceptions of difficulties. It is hoped that further objective evidence of the process will emerge to support the required increased investment.

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