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Supporting clinical teachers

A review of the literature

Background

Medical student teaching in the community has been shown to produce equivalent or improved learning outcomes compared to teaching based in the hospital setting. It is well recognised by Australian universities that there is a current shortage of clinical teachers, that these teachers are both under-resourced and underfunded and that the majority of clinical teachers have no formal training in medical education.

Objective

A review was undertaken to determine what body of knowledge exists in the Australian literature regarding the educational support needs of general practitioners who teach medical students, and to highlight areas that require further research.

Discussion

Need for improved support was identified in all Australian articles that assessed GP support requirements. There is sufficient evidence to guide improved support for GP clinical teachers. However, funding for more support programs is needed, as is further research into the area.

■ **Medical student teaching in the community has been shown to produce equivalent learning outcomes compared to teaching based mainly in the hospital setting.¹ In Australia, it has been shown to produce improved learning outcomes when associated with a 12 month community rural term,^{2,3} and is positively associated with recruitment of doctors to general practice in the rural setting.⁴ Universities both in Australia and internationally recognise that there is a current shortage of clinical teachers, that teachers are both under-resourced and underfunded,^{5,6} and that the majority of clinical teachers have no formal training in medical education.^{7,8}**

A major factor influencing a medical student's choice of specialty is a positive experience during clinical attachment.^{7,9} This experience affects the recruitment and retention of doctors in rural locations.¹⁰ Clinical teachers can also have a significant effect on their students

as positive role models.¹¹ General practitioner clinical teachers could therefore be a major influence on whether or not a student elects to undertake vocational training in general practice. Given the current workforce crises in both urban and rural general practice in Australia, this is a significant responsibility. It follows that GP clinical teachers should be highly valued by both universities and government. However this is not reflected in the support or remuneration they receive.^{6,12-17} There is increasing evidence that more needs to be done to support the recruitment and retention of GP clinical teachers.¹⁸ Without these teachers universities will be unable to deliver essential elements of the medical curriculum, which a growing body of evidence suggests should be increasingly community based.^{1-3,19}

Methods

Medline (1966 to present), CINAHL (1982 to present), ERIC (1966 to present) and PsychINFO (1985 to present) were searched on the Ovid platform for journal articles. Key words were: teacher, trainer, educator, tutor, supervisor, preceptor, mentor, general practitioner, GP, primary care physician, family physician, clinical, medical student, undergraduate, community, ambulatory, rural, remote, urban, metropolitan. References in relevant articles were also searched and reviewed. Personal communication with some authors resulted in further relevant articles, which were reviewed. The major focus was on Australian publications, however, publications from the United Kingdom and the United States were included for supporting evidence and context.

Nomenclature

There are a number of terms used to describe GPs who teach medical students in their community practices. General practitioners who train registrars are generally referred to as GP supervisors, mentors or medical educators; whereas those who teach medical students are referred to as GP tutors, clinical associates, clinical teachers or preceptors. There is evidence that the learners (the medical students or registrars) perceive the role of the clinical teacher as encompassing all three processes of mentoring, supervising and teaching.²⁰

Summary of results

Australian literature

Of the few Australian studies that took into account the perspective of the GP clinical teacher, the majority clearly identified the need for improved support from universities.^{2,7,14,16,18,21} The form of this support included a need for improved communication between universities and GP preceptors;^{7,14,18} acknowledgment of the time and productivity losses incurred by GPs when teaching medical students in their practices;^{14,18} the need for improved teaching resources,¹⁸ in particular the provision of professional development activities to enhance quality teaching;^{7,18} administrative support;¹⁴ and funding for preceptor time.¹⁶

The only Australian program reporting specifically supporting GP clinical teachers was the POPPIES program by Dalton et al.⁷ There was no data published regarding any outcomes, although mention was made that the preceptors evaluated the workshops positively and that they provided relevant professional teaching development, improved support, and improved communication from the university.⁷ It is likely then that GP satisfaction and GP teaching skills were improved, however there is no direct evidence for this.

The only objective data regarding outcomes of improved support in the Australian literature was from Walters et al.² The authors showed that despite the PRCC program not directly aiming to provide increased support for clinical teachers, there was increased communication and administrative support and the program resulted in improved student experience and improved student learning.²

There are no studies that have explored the perceptions of urban GP clinical teachers regarding their support needs.

International literature

In the international literature there is support for the findings by the cited Australian authors.^{12,13,22,23} The UK seems to be leading the way in the development of community based educational programs for medical students – where significantly more emphasis and time is given to teaching in the community compared to traditional hospital based programs – and this is reflected by the amount of literature from this country. There is emphasis on providing opportunities for doctors to learn about teaching and the major factor for this has been increased accountability in higher education.⁸ Medical schools in the UK are rated by a peer review system, the Quality Assurance Assessment, to help prospective students make choices; and one of these ratings includes an assessment of the opportunities for staff training and development.²⁴ Pressures to improve teaching have also come from within the profession. Two major reports: the Calman report on postgraduate education,²⁵ and the General Medical Council's report, *Tomorrow's Doctors*,²⁶ set out clear guidelines which medical schools and postgraduate training schemes have to meet. The reports also promote the use of more effective teaching, learning and supervision methods based on the growing body of educational research. These guidelines have promoted a change of emphasis in

teaching that requires teachers to develop new skills. This has led to many medical schools appointing educationalists to advise on the process and provide appropriate learning opportunities for staff.²⁴ It is of note that the 1993 *Tomorrow's Doctors* report was revised in 2003, taking into consideration developments in educational theory and research, and professional practice.²⁷

Discussion

It is clear from the Australian literature that GP clinical teachers are not adequately supported to teach medical students on clinical rotation. Need for improved support was identified in all the Australian articles that took into account the perspective of the GP regarding support requirements.^{2,7,14,16,18,21}

There is sufficient evidence to act as a guide on how support for GP clinical teachers can be improved and this is consistent across both Australian and international literature. There is also some evidence to indicate that teaching medical students in a rural community for a 12 month term is associated with improved learning outcomes.^{2,3} However further research is needed, particularly with regard to outcomes of improved support programs. There have been few support programs reported in the literature, and there is little data on the outcomes of this support. It is likely that this is due to the inherent difficulties in measuring outcomes such as 'improved GP teaching skills' and 'improved student learning'. Long term outcomes of improved support for GP teachers also need to be considered as these will have funding implications if it can be shown that improvements in student learning, GP teacher retention, and a positive vocational influence on students can be achieved by increasing support.

Government and university medical schools have a vested interest in the quality of the education of medical students in the community. It is likely to positively affect the number of medical students entering general practice training and it is likely to be associated with improved student learning outcomes. These significant potential benefits will only be realised if there is recognition by these institutions with increased funding of support programs for GP clinical teachers and research into the outcomes of such support.

Conflict of interest: none declared.

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