Medical training and the point of conception of a rural doctor: a longitudinal study based on the MSOD project

Michael Jones¹, Ian Wilson², Diann Eley³
¹Macquarie University, ²University of Wollongong, ³University of Queensland

Background: The decision to become a rural doctor may be formed at one or more points during a doctor’s upbringing and training and may be revisited at any time during their subsequent career. It remains unknown at what point during their training medical students develop an interest in rural medicine and this knowledge may lead to insight into what aspect of training is most influential.

The aim of this study was to identify, on a national basis, changes in interest by medical students in rural practice during the course of medical training and to isolate the point that most strongly correlates with eventual attitude to rural medical practice.

Method: The Medical Schools Outcomes Database and Longitudinal Tracking (MSOD) Project currently follows all medical students in Australia and New Zealand from commencement of studies through to the first postgraduate year (PGY1), although further follow-up is currently under way. Preferred location of practice is asked on commencement, at completion of studies and in PGY1.

Results: 1459 graduates provided location preference data on entry, at completion and at the end of their first postgraduate year. Student who fail to meet the RUSC criteria for rural background consistently report a preference for urban practice with relatively minimal conversion (<10%) to rural preference between any two time points. In contrast, while students who meet the RUSC criteria are more likely to retain a preference for rural practice than those who do not there is a substantial conversion to urban preference (30–50%) between any two time points.

Three antecedent factors independently predicted rural preference in PGY1, in decreasing order of association: rural preference at end of degree (OR=27.78, 95% CI 18.90 to 40.82); rural preference at commencement of studies (OR=4.39, 95% CI 2.97 to 4.11); and being ‘ever married’ compared with never married (OR=2.57, 95% CI 1.61 to 4.11). Together these three antecedents provide good discrimination between rural and urban preference interns with an area under the receiver-operator characteristic curve 0.89 (95% CI 0.87 to 0.92).

Conclusions: Students’ attitude to rural practice at the end of their PGY1 year is more strongly influenced by their attitude at the end of medical training than their incoming attitude or rural background, confirming the crucial influence of the medical program in forming attitude to a rural medical career.