Short Report

Factors influencing the practice choices of Australian medical students – A feasibility study

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Doctors' choices of specialty, practice location and hours of work are critical issues in a climate of workforce mal distribution. Using social cognitive career theory [1] as the theoretical framework for this research, we investigated the association between Australian medical students' career aspirations and their career decision making attitudes, values, background and demographic factors.

Participants, methods and results

A national cross-sectional study using a web-based survey design was conducted and all Australian medical schools were invited to participate. Given the current stage of their degree, first- and final year students were asked to indicate the medical specialty and practice location that they would most likely choose, and the amount of time they expected to work when all medical training was complete. We assessed career decision-making attitudes using measures of self-efficacy, professional and lifestyle outcome expectations, goals and barriers salient to choosing a specialty and practice location. Values relating to the practice of medicine were assessed using six core values: prestige (to be recognised by others as a top physician), service (to care for others regardless of financial gains or other rewards), autonomy (to have freedom, independence, and control over work style, schedule and lives), lifestyle (to have a predictable and stable work schedule), management (to supervise and have responsibility for others), and scholarly pursuits (to engage in research and teaching activities) [2]. Age, sex and background characteristics were also collected.

Six medical schools located across five Australian states and territories (QLD, NSW, ACT, VIC, SA) consented to the study. Of the 496 students who consented to participate, a sample of 231 students (79 men, 152 women) completed the survey (47%). Students were aged between 18 and 44 (mean 22.6 years, SD 4.8 years). For the analyses, specialties were grouped into primary care and non-primary care, practice location was grouped into urban and rural areas, and hours of work was categorised as full time and part time. Results from the bivariate logistic regression analyses are presented in Table 1.

There was a stronger preference for choosing a non-primary care specialty by students who placed a high value on prestige and scholarly pursuits, and who reported high levels of barriers and professional outcome expectations. Conversely, those who valued autonomy were more likely to choose a primary care specialty.

Students who placed a high value on service and had a small town/rural background preferred to practise in a small town/rural location. In contrast, those who valued prestige in medicine were less likely to choose a small town/rural practice location. As the age of

a student increases there is a stronger preference for choosing to practise in a small town/rural location.

Students who valued scholarly pursuits expected to work part time. Women, compared with men, are 3.8 times more likely to expect to work part time.

Comment

This study provides notable evidence of relationships, not previously reported in the literature, between specialty choice and professional outcome expectations, barriers, scholarly pursuits and autonomy; practice location and age; and hours of work and scholarly pursuits. Consistent with other research this study revealed evidence of a relationship between specialty choice and prestige; practice location and prestige, service [3], and rural background [4]; and hours of work and gender [5]. Limitations of the study relate to the cross-sectional design and individual sample size. Findings from the current study provide a solid foundation for our national longitudinal study that is tracking medical students' career choices over time.

Acknowledgements

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References

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Table 1: Bivariate logistic regression model for choice of specialty, practice location and hours of work

Response variables	Explanatory variables	Odds ratio	95% confidence interval
Specialty:	Professional outcome expectations	1.87*	1.37-2.54
Non-primary care	Barriers	1.40**	1.17-1.66
Primary care (R)			
	Prestige	1.87**	1.37-2.54
	Scholarly Pursuits	1.33*	1.11-1.59
	Autonomy	0.74*	0.57-0.98
Practice location:	Prestige	0.77*	0.66-0.90
Small town/rural	Service	1.30*	1.06-1.59
Urban (R)			
	Age	1.16*	1.05-1.28
	Background:		
	Urban	0.25*	0.08-0.74
	Small town/rural	1.00	
Hours of work:	Scholarly Pursuits	1.21*	1.08-1.36
Part time	Gender:		
Full time (R)	Male	1.00	
	Female	3.81*	1.21-11.96

*Significant at 0.05 level, **significant at 0.01 level.
(R) indicates reference category.