Impact of GP placement location (rural v metro) and students' experience with their placements on likelihood of pursuing GP as a career

Alexandra Yeoh, Angeline Sathiakumar, Cynthia Leung, Tan Kang Ning, Rebekah Hoffman, Andrew Gosbell

Aim

This study seeks to investigate whether clinical-year medical students' experience with their GP placements or where they were placed (rural/remote versus metropolitan/urban locations) had any positive impact on the likelihood of pursuing GP as a career.

Background

Insufficient numbers of general practitioners in Australia, especially in rural and remote areas

Undergraduate (UG) GP placements could be a possible intervention strategy

Potential might be more significant in Australia, as only a small minority of Australian medical students have clear career intentions at graduation

Previous research has shown UG GP placements have positive impact on a medical student's likelihood to consider/pursue a GP career
Longitudinal primary care programs more effective than isolated placements

Medical education which takes place in GP settings is becoming more and more common in the last decade-
Flinders University: Parallel Rural Community Curriculum

Longitudinal integrated clerkships (LICs)- another emerging medical education curriculum

However, to the best of our knowledge, there are no studies which compare urban vs rural GP placements.

Results of this study can be used to guide appropriate exposures to GP during medical education to increase proportion of students pursuing GP

	Name	Type	Width	Decimals	Label
1	VAR00001	Numeric	10	0	Gender (0 = Male, 1 = Female)
2	VAR00002	Numeric	30	0	Age (0 = <18, 1 = 18–24, 2 = 25–30, 3 = 31–40, 4 = 41–50, 5 = >50)
3	VAR00003	Numeric	40	0	Completed GP training or not (0 = No, 1 = Yes)
4	VAR00004	Numeric	40	0	Where did you undertake your GP rotation? (0 = No/Only training, 1 = Metropolitan, 2 = Rural/Remote, 3 = Both)
5	VAR00005	Numeric	40	0	How would you rate your GP rotation experience overall? (0 = Mostly positive, 1 = Not negative/positive/not sure, ...
6	VAR00006	Numeric	40	0	Since completing your GP rotation(s), would you say you are now more likely or less likely to pursue a career as a GP...
7	VAR00007	String	895	0	

Table 1. 2009 Analysis method.

	Name	Type	Width	Decimals	Label
1	VAR00013	Numeric	8	0	Age group (0 = <18, 1 = 18–24, 2 = 25–30, 3 = 31–40, 4 = 41–50, 5 = >50)
2	VAR00014	Numeric	8	0	Gender (0 = Male, 1 = Female)
3	VAR00015	Numeric	8	0	Attitude to GP (0 = Very negative, 1 = Mostly negative, 2 = Neutral, 3 = Mostly positive, 4 = Very p...
4	VAR00016	Numeric	8	0	Completion of GP placement (0 = No, 1 = Yes)
5	VAR00017	Numeric	8	0	Completion of GP placement in metropolitan region (0 = No, 1 = Yes)
6	VAR00018	Numeric	8	0	Rating of GP placement in metropolitan region (0 = Mostly negative, 1 = Neutral, 2 = Mostly positive)
7	VAR00019	Numeric	8	0	Likelihood of pursuing GP as a career after metropolitan GP placement (0 = Less likely, 1 = No cha...
8	VAR00020	Numeric	8	0	Completion of GP placement in rural/remote region (0 = No, 1 = Yes)
9	VAR00021	Numeric	8	0	Rating of GP placement in rural/remote region (0 = Mostly negative, 1 = Neutral, 2 = Mostly positive)
10	VAR00022	Numeric	8	0	Likelihood of working in rural/remote regions after rural/remote GP placement (0 = Less likely, 1 = ...
11	VAR00023	Numeric	8	0	Likelihood of pursuing GP as a career after rural/remote GP placement (0 = Less likely, 1 = No cha...
12	VAR00024	String	1520	0	
13					

Table 2. 2019 Analysis method.

Methods

Methods	2009	2019
1. Ethics approval granted by UOW	Gender, Age	Gender, Age
2. Survey distributed on Survey Monkey	What GP training conducted, if so where?	Attitude toward general practise
3. Analysis of data using SPSS	Experience in the placement	If GP placement was completed, where and its rating
4. Finding correlation	Likelihood of pursuing a career as a GP	Likelihood of working in a rural area after GP placement
		Likelihood of pursuing a career as a GP

Results

Key demographic in both data sets: participants were mostly **female, single or in a relationship with no children, non-ATSI and between the ages of 18-30.**

2009

Key Findings –
- In 2009, of a total of 5041 clinical-year students, 520 were surveyed
- 81.3% rated their GP experience "mostly positive" in 2009
- The region where GP placement was undertaken did not significantly increase the likelihood of pursuing GP as a career $X2$ (1, N = 312) = 1.871, p>0.05
- Correlation between the rating of students' GP experiences (irrespective of location) and the desire to become a GP in the future $X2$ (1, N = 335) = 45.503, p<0.001

Positive responses
- EXPOSURE
- CHALLENGING
- CONSULTS

2019

Key Findings –
- In 2019, of a total of 7836 clinical-year students, 705 clinical-year students were surveyed
- 78.2% of metropolitan participants in the 2019 survey responded with "mostly positive", while 84.7% of 2019 rural placement participants answered likewise
- Analysis of data collected in 2019 supports the fact that the location of GP rotation did not have a significant impact on the dependent variable X^2 (1, N = 437) = 0.073, p>0.05.
- However, a strong association was seen between the participant rating of their GP placement and an increase in desire to be a GP X^2 (1, N = 436) = 50.24, p<0.001.

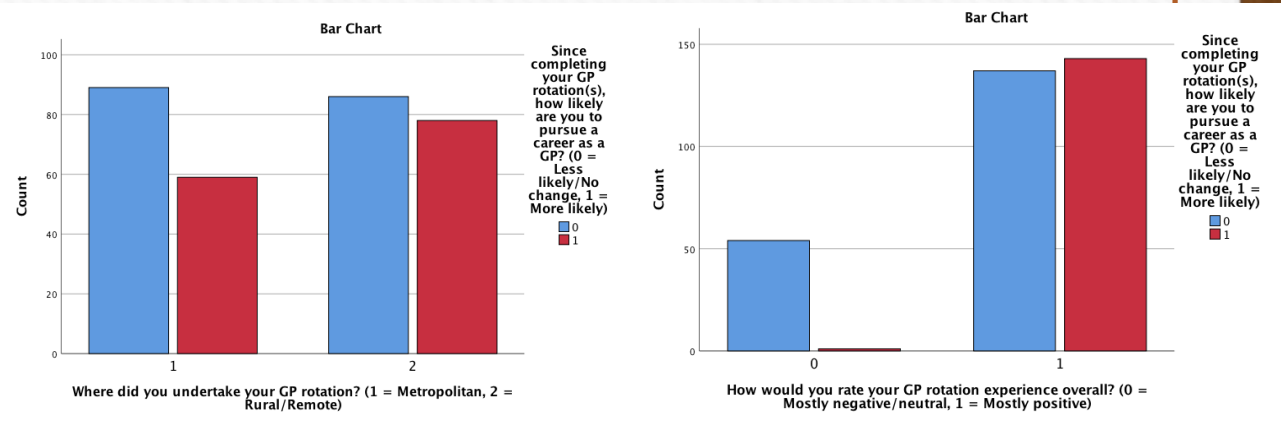Positive responses
- PARALLEL CONSULTING
- PROCEDURAL EXPERIENCE
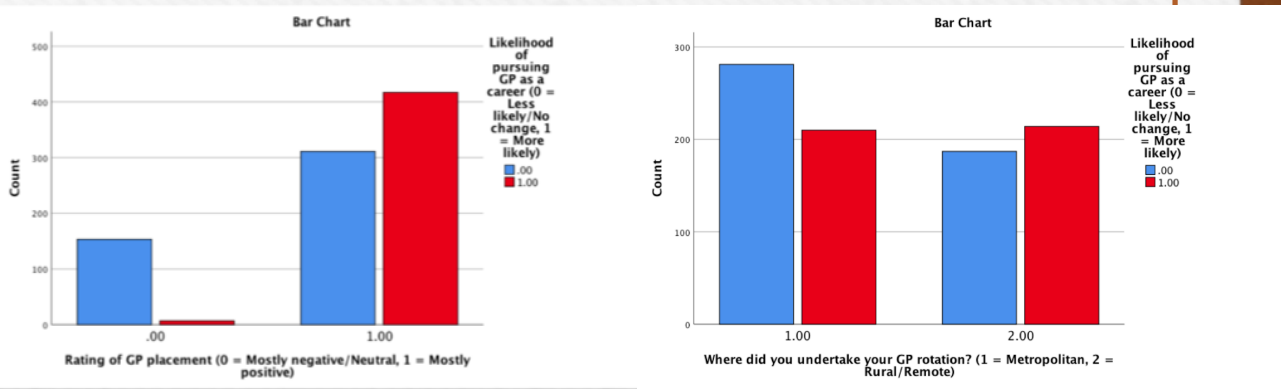

Chart 1. 2009 results.

Chart 2. 2019 results.

Discussion

Factors that could affects choosing general practice as a career choice:
- Beliefs
- Personal preference
- Lifestyle
- Proximity of family
- Better experience
- Student placement

Students' experience of their placement was the only significant independent variable (**not** location).
Potential reasons are:
- Practical experience (parallel consulting)
- Rural areas
- Variation of environment
- Access to resources

Conclusions

- Across both years, students' experience with their placements more significant compared to placement location
- Further study should focus on how to better engage with students during their placements or how to further incorporate the elements that students highlighted – parallel consulting, procedural experiences etc.