

Final-year medical students' perceptions of maternity care in general practice

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Abstract

Aims To investigate the perceptions of final year medical students' (known as trainee interns or TIs) at the University of Otago about maternity care in general practice, their possible future roles in general practice maternity care, and factors influencing this.

Methods An anonymous questionnaire using the online programme SurveyMonkey was emailed to the 227 Otago University TIs. Results were analysed using SurveyMonkey statistical analysis.

Results The response rate was 50.7%. About 90% of the TIs thought GPs should provide antenatal and postnatal care, 80.7% supported shared care and 55.7% thought GPs should provide full maternity care if interested and trained to do so. Almost 80% thought women should have access to full maternity care in general practice.

If practicing as a GP 90% or more of respondents would consider providing prenatal, early pregnancy, antenatal, postnatal care, or shared care and 64.0% full maternity care. Of the 29 TIs (25.2%) who had seen a GP practicing full maternity care 82.8% would consider offering this level of care if practicing as a GP. And 68.3% of the 65 TIs interested in a rural general practice career would consider providing full maternity care. Issues of training, professional support, funding and continuity of care for patients were important factors in contemplating providing full maternity care.

Conclusions TIs are interested in providing a wide range of maternity services if practicing as a GP. Many professional and lifestyle issues could influence our future doctors when deciding whether to practice maternity care in general practice.

Maternity care workforce shortages are a problem in New Zealand. There is a shortage of both midwives and specialist obstetricians in some regions¹ and a dramatic decline in the number of GPs providing full maternity care means that most women do not have the choice of a GP obstetrician (GPO).

Since the changes to maternity care legislation in the 1990s, and the introduction of the lead maternity carer (LMC) model of care, midwives can practice independently in New Zealand.¹ The LMC has overall clinical and budgetary responsibility for a woman's primary maternity care.¹

Midwives now provide at least 80% of LMC services.² Women choose their LMC, who can be either a midwife, GPO or obstetrician. An increasing number of women experience difficulties finding a suitable LMC,³ especially in rural areas.⁴ The government has allocated funding for training and retraining of GPs in maternity care.⁵ This raises the question: are the future doctors of New Zealand interested in providing maternity care?

There are no known New Zealand studies investigating medical students' views about providing maternity care as part of general practice. Reasons for declining GP maternity services identified in a review of research from Canada, USA, parts of Europe and Australia include: interference with lifestyle and interruption of office routine, fear of litigation and costs of malpractice insurance, insufficient training and insufficient numbers of cases to retain competency.⁶

A recent New Zealand study investigating factors that influence trainee interns (TIs), and junior doctors when considering career choices found that interest in a specialty and lifestyle were the two most important factors for those considering general practice as a specialty.⁷ Having personal experience in a specialty, reports from others in a specialty and having individual role models most influenced career decisions.⁷ With only 54 GPOs identified in 2006 by the Royal New Zealand College of General Practitioners,⁸ opportunities for students to gain any personal experience or exposure to this role could be limited.

This study aimed to investigate TIs' perceptions about the provision of maternity care in general practice in New Zealand, their possible role as future GPs in that service, and the factors that influence this.

Methods

This study surveyed TIs enrolled at the Dunedin (n=69), Christchurch (n=72) and Wellington (n=86) Schools of Medicine, University of Otago, for the year November 2009 - November 2010. TIs are final-year medical students in their sixth year of training. Those surveyed included 12 TIs from the 2008-2009 TI class who were still completing their final quarter, giving a total of 227 students. Twenty TIs had completed the Rural Medical Immersion Programme (RMIP) as fifth-year students, undertaking that year of their medical course in a rural setting.

Students were invited by email to participate in an online questionnaire. Two reminder emails were sent at 1 week intervals after the initial invitation. All emails included a hyperlink to the questionnaire, and a Participant Information Sheet. The second reminder email included the introduction of \$50 vouchers as spot prizes to randomly selected TIs, to encourage participation.

The questionnaire was delivered through the online programme SurveyMonkeyTM and included ten questions and additional demographic data. It could be completed and submitted online. Maternity care periods were defined as: prenatal care (preparation for pregnancy), early pregnancy care (pregnancy testing, management of complications of early pregnancy), antenatal care (monitoring and support throughout pregnancy), postnatal care, shared care (seeing pregnant women on alternate antenatal visits to midwife's visits and postnatally), and full obstetric care (through pregnancy, labour, delivery, and postnatally). Full obstetric care is also described as full maternity care. Quantitative results were analysed using the statistical analysis options available through SurveyMonkey.

Ethics approval for this study was granted by the University of Otago Human Ethics Committee.

Results

Response rate and representativeness—115 surveys were completed giving a response rate of 50.7%. Fifty-four TIs were on their Elective, a 3-month module encouraging other medical experience in New Zealand or overseas. Students on elective were less likely to have access to their university email to complete the questionnaire. Response rates were highest in Dunedin, and lowest in Wellington, ranging from 46.5% to 55%.

The demographic characteristics of the respondents are shown in Table 1. Respondents could identify with more than one ethnic group. The 'Other' ethnicity category includes two counts of 'New Zealander' and a further two as 'Wellington'

and 'Waikato'. There was a slight over-representation of TIs who were younger and of New Zealand-European ethnicity.

Table 1. Demographic characteristics of respondents

Characteristic	Respondents (%)	All TIs (%)
Age (years)		
20–24	89 (77.3)	133 (58.6)
25–29	21 (18.3)	88 (38.8)
30–34	4 (3.5)	5 (2.2)
35–39	1 (0.9)	1 (0.4)
Total	115 (100)	227 (100)
Gender		
Male	50 (43.5)	99 (43.6)
Female	65 (56.5)	128 (56.4)
Ethnicity		
NZ European/Pakeha	65 (54.6)	112 (43.2)
Maori	3 (2.5)	8 (3.1)
Chinese	14 (11.8)	30 (11.6)
Indian	6 (5.0)	11 (4.2)
Korean	3 (2.5)	11 (4.2)
Other	32 (26.1)	87 (33.6)
Total	119 (100.0)	259 (100.0)

General Practice and its role in maternity care—TIs were asked what maternity care services GPs who are interested and trained in maternity care should be offering. Prenatal and postnatal care had the highest levels of support, at 94.8% and 92.1% respectively. Most TIs also thought early pregnancy care (88.7%) and antenatal care (89.6%) should be offered.

Shared care with a midwife was supported by 80.7% of TIs and 55.7% thought such GPs should provide full maternity care (including care in pregnancy, labour/delivery and postpartum). Comments showed one reservation about providing maternity care was the impact on GPs' workload (11 comments). Almost all TIs thought that pregnant women should have the option of having their GP involved in antenatal and postnatal care (98.3%), with 79.1% believing that women should have access to full maternity care with a GP.

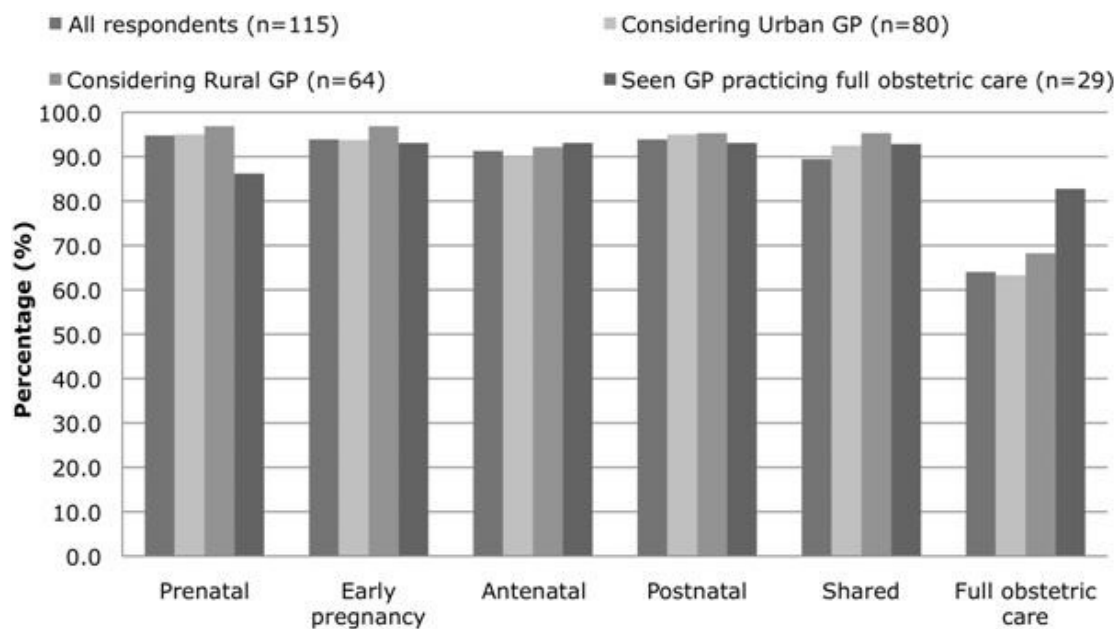
Exposure to maternity care in general practice—More than half (56.5%) of respondents had seen a GP practicing antenatal and postnatal care and 25.2% had seen a GP practicing full maternity care. This exposure to general practice maternity care was mainly as a medical student (70.1%), but also within the community (14.9%), and family (10.4%). Of the 13 respondents who undertook the Fifth Year RMIP, ten (76.9%) had seen antenatal and postnatal care, and six (46.2%) had seen full maternity care being practiced by a GP.

Our future GPs—A future career in urban general practice is being considered by 70.2% of respondents, and 56.1% are considering practicing as a rural GP. More than 90% of all respondents would consider (respondents who answered 'yes' or 'maybe') providing prenatal, early pregnancy, antenatal, and postnatal care if practicing as a GP

(Figure 1), with more than 70% answering ‘Yes’ to providing these services. Eighty-nine point five percent would consider providing shared care with a midwife. While 64.0% of respondents would consider providing full maternity care if practicing as a GP, almost half of that group (45.2%) stated, ‘Yes’, they would like to provide this service.

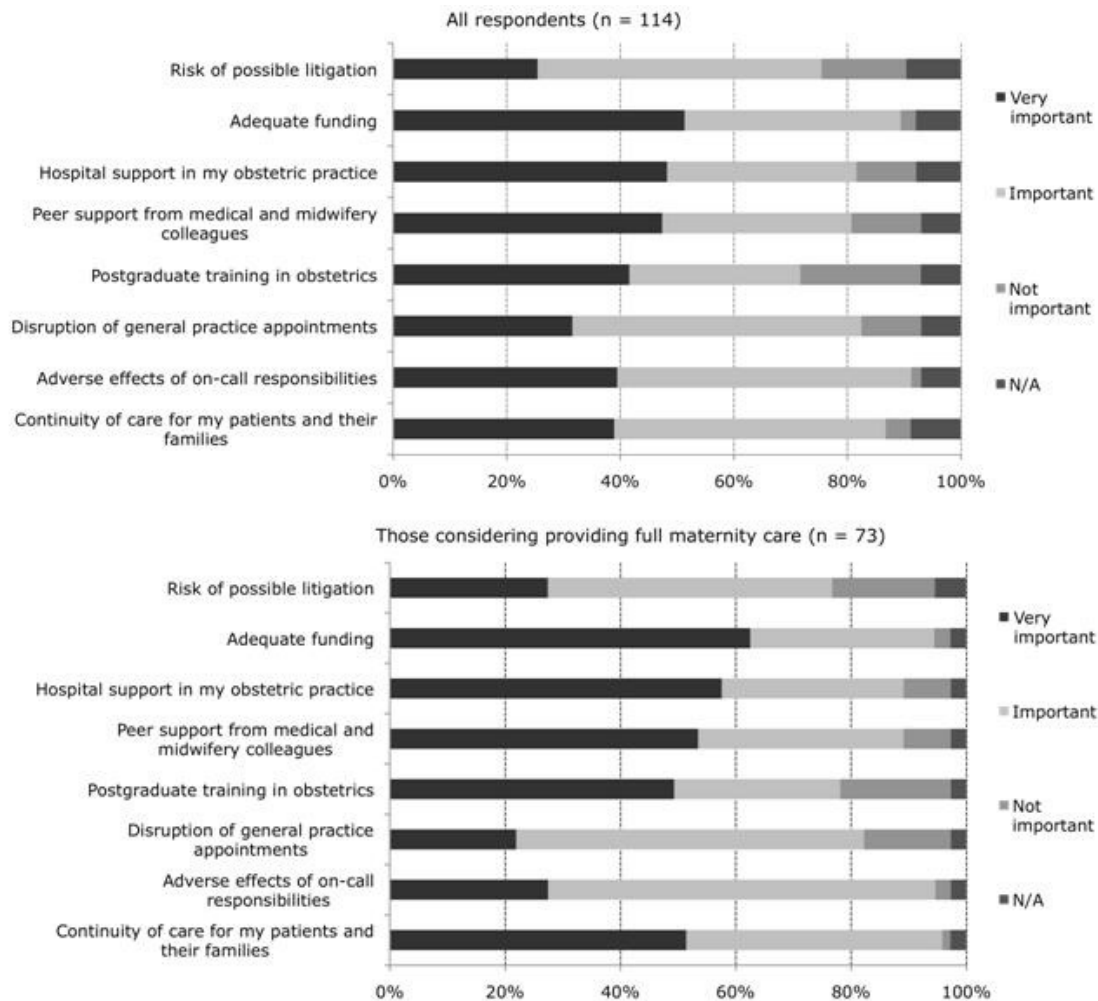
Results were similar for the subgroup of respondents who indicated an interest in general practice as a career (urban or rural). The main differences however were in regard to TIs’ interest in providing full maternity care in their general practice. Those TIs who had seen a GP practicing full maternity care were most likely to consider providing full maternity care in their general practice (82.8%) (Figure 1). Those TIs considering rural general practice as a career were also more interested to provide full maternity care (68.3%) (Figure 1).

Figure 1. Pregnancy care respondents would consider providing if practicing as GP



Respondents were asked to rate the importance of eight professional and lifestyle issues related to maternity care in general practice on a 3-stage scale of ‘not important’ to ‘very important’ (Figure 2).

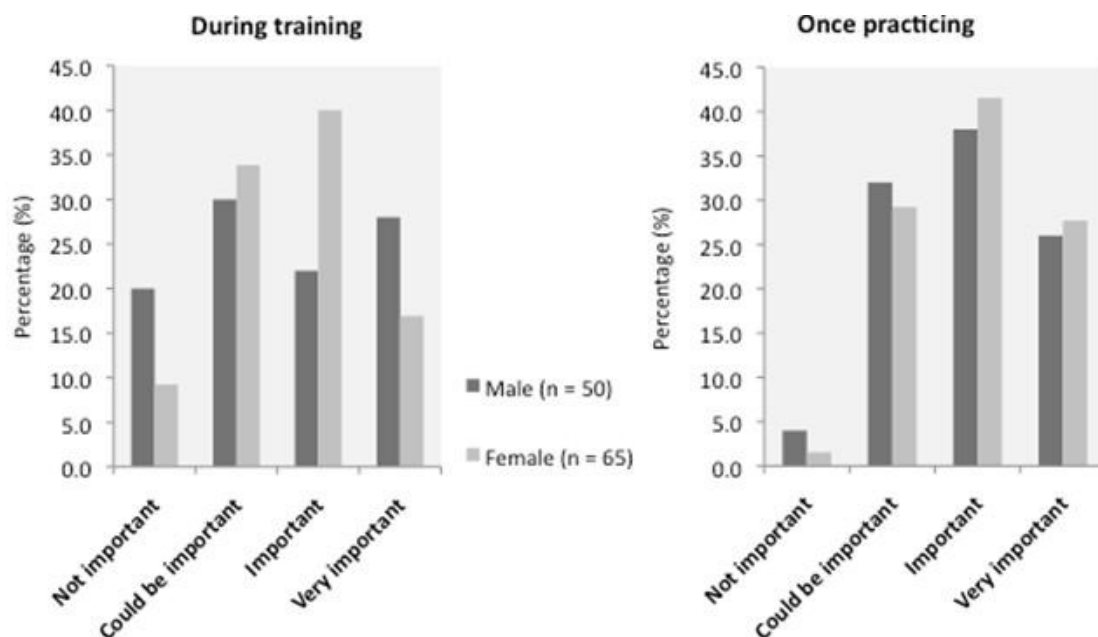
Figure 2. Importance of professional and lifestyle issues if practicing maternity care in general practice.



Although all issues presented were considered ‘important’ or ‘very important’ by the vast majority, issues most popularly rated ‘very important’ were: postgraduate training in obstetrics, peer support from medical and midwifery colleagues, hospital support and adequate funding. For the 73 TIs who indicated they would consider providing full maternity care the issues most popularly rated ‘very important’ also included continuity of care for their general practice patients, in addition to the above four issues identified by all respondents.

Flexible hours and the ability to work part-time was a big consideration for most respondents. This was valued highly both during training and once practicing, with only 2.6% indicating it was not important once practicing. The main reasons given from those who commented were family commitments (14 comments), and to have a balanced lifestyle (4 comments). Gender differences were present ‘during training’, but these disappeared ‘once practicing’ (Figure 3).

Figure 3. Importance of part-time work/flexible hours by gender (male n=50, female n=65).



Awareness of training options—Awareness of two postgraduate training options was investigated: the Postgraduate Diploma of Obstetrics and Medical Gynaecology (PGDipOMG), and the Certificate of Women’s Health. While most respondents had heard of the PGDipOMG (82.5%), only 25.4% were aware of the Certificate in Women’s Health. Many indicated they would consider (‘yes’ or ‘maybe’) undertaking these courses in the future, with 73.4% (n=109) respondents showing interest in the PGDipOMG, and 52.8% (n=106) in the Certificate of Women’s Health.

Discussion

This is the first study of TIs’ interest in maternity care in general practice in New Zealand. A moderate response rate (50.7%) was achieved, which was similar for each of the three Otago Schools of Medicine. The timing of the survey may have influenced the response rate, as it was sent out in the first week of the TI year when students are busy fitting into their new roles.

One-quarter of TIs invited to participate were on their elective period, which is generally completed overseas. A proportion of these students would not have had internet access to complete the questionnaire.

Students on elective were less likely to have accessed, or may have been unable to access, their university email to complete the questionnaire. Considering the response rate, bias may be present as those interested in general practice as a career or with views on maternity care in general practice may have been more likely to respond. These are the main limitations identified in this study. Although slight over-representation of younger TIs, and NZ European ethnicity was observed, these differences were small.

New Zealand is in the midst of a maternity workforce shortage.¹ Rural areas in particular are short of midwives and obstetricians^{1,2} and the number of active GPOs throughout the country is now very small.⁹ In addition to GPOs withdrawing from maternity care it is thought there will also be ongoing issues of recruitment of GPs into maternity care.¹⁰ Currently those doctors who do undertake the PGDipOMG no longer do so with the intention to practice intrapartum maternity care.¹¹

Our study has revealed that despite this, final year medical students (TIs) not only expect that interested and trained GPs should provide maternity care, but that of those TIs considering general practice as a future career most have an interest in providing antenatal care and shared care, and over half have some interest in providing full maternity care in their future practice (Figure 1). This suggests that the recruitment difficulties are not simply due to a lack of interest, but that other factors are responsible.

Those students who had completed the RMIP in their fifth year of training were both more likely to be considering rural general practice as a future career, and to be considering providing full maternity care in this role (Figure 1). This finding is encouraging given the particular shortage of maternity care providers in rural areas in New Zealand.

The study shows that the RMIP is successful in meeting two of its goals: to encourage interested students to pursue a career in rural medical practice;¹² and to utilise the large range of rural community clinical learning experiences which are not available to students in tertiary teaching hospitals,¹² including increased exposure to primary maternity care.

Personal experience in a specialty has been shown to have the biggest influence on career decisions for TIs and junior doctors.⁷ This was consistent with our findings that those students who reported having seen a GP practicing full maternity care were most likely to consider providing full maternity care if they were to become a GP (Figure 1). This is encouraging, but also raises the concern that with the number of GPOs continuing to fall, fewer and fewer students will experience a GP practicing maternity and the numbers who will consider it as a future career path will dwindle.

To combat the maternity workforce shortage, one governmental response has been to allocate money for training and refresher courses for GPs in maternity care.⁵ Whether this strategy will be effective is uncertain. Currently doctors still complete the PGDipOMG, but not with the intention to practice GP obstetrics.¹¹ In Australia it has been shown that of those GPs who enrol in the Diploma with the intention to practice maternity care, most decide during or after training not to pursue procedural obstetrics.¹³ Thus despite the high level of awareness of the PGDipOMG among TIs and their potential interest to enrol in it, this may not be sufficient to increase the number of GPs providing maternity care. Other areas also need targeting.

Our results suggest that although future doctors are likely to value training opportunities, improvements to overall working conditions such as availability of both peer and hospital support, and adequate funding will also be required for TIs to practice maternity care in general practice. Part-time and flexible hours were highly valued both by men and women (Figure 3), due to a desire for family time and life balance.

Overall these findings are similar to studies by Wiegers,⁶ and an Australian study of GPOs and obstetricians in Victoria, Australia.¹³ The Victoria study identified the themes: clinical issues, lifestyle and indemnity as key areas to address to recruit doctors into maternity care. New Zealand health professionals work within a unique medicolegal legislative environment compared to other OECD countries so indemnity issues are unlikely to be as important.

Conclusion

This study has shown that most TIs believe GPs should provide maternity care and women should be able to access maternity care from their GP. TIs show an interest in providing a range of maternity care services, including shared care with midwives and providing full maternity care, if practicing as a GP in the future.

The main factors that could influence their becoming involved in providing maternity care in general practice are: personal experience of GPs providing maternity care, adequate training, professional and peer support, adequate funding for maternity care, and a practice model that supports professional practice and lifestyle options.

Competing interests: None declared.

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