

# Doctors and romance: Not only of interest to Mills and Boon readers

Paul Callister PhD (Social Policy);<sup>1</sup> Juthika Badkar MPH;<sup>2</sup> Robert Didham PhD (Asian Studies)<sup>3</sup>

## ABSTRACT

**INTRODUCTION:** Internationally there is a growing demand for health services. Skilled health workers, including doctors, have a high degree of international mobility and New Zealand (NZ) stands out internationally in terms of the significant flows of doctors in and out of the country. Through changes in training of doctors in NZ and migration flows, there have been major shifts in the composition of the medical workforce in NZ since the mid-1980s.

**AIM:** Studies of the changing nature of the medical workforce often focus on gender and migration separately as well as only considering doctors as individuals. The aim of this exploratory study is to examine the living arrangements of doctors, the composition of migrant doctors who are coming to NZ, and to understand the educational and employment status of the partners of doctors.

**METHODS:** This study is a descriptive analysis primarily using census data from 1986 through to 2006 and immigration data collected by the Department of Labour.

**RESULTS:** Half of the female medical doctors approved for residence through the Skilled/Business stream migrated independently, while for male doctors less than a third came to NZ independently. Male migrant doctors were more likely to be partnered. Census data showed that people with medical backgrounds tend to partner with each other. However, these relationships are changing, as more women become doctors. In 1986 about 14% of male doctors had a nurse or midwife as a partner and nearly 9% had a doctor partner. By 2006 the proportion of partners of male doctors who were also doctors had risen to 16%, higher than the 9% who were nurses. For female doctors the changes are more dramatic. In 1986, 42% of female doctors in relationships had a doctor as a partner. By 2006, female doctors had increased substantially, but the percentage with a doctor partner had dropped to under a third. Well-qualified couples where one or both are doctors, have a greater propensity to live in main urban areas.

**DISCUSSION:** Through official reports and extensive media coverage, the NZ public is well aware of local and national doctor shortages. There is also awareness, often through personal visits to a GP or hospital, of the significant rise in number of female and of foreign-born doctors. The choices doctors are making in living arrangements need to be taken into account when considering both national and international recruitment of medical staff. Researchers and policy makers may need to consider family migration issues more than they have in the past for doctors as well as for other migrant groups.

**KEYWORDS:** Family practice; partners; emigration and immigration, female; manpower

<sup>1</sup> Associate Professor, Institute of Policy Studies, Victoria University of Wellington

<sup>2</sup> Labour Market Futures, Department of Labour

<sup>3</sup> Population Statistics, Statistics New Zealand

J PRIMARY HEALTH CARE 2009;1(2):101–107.

## Introduction

Hardly a day goes by without some media report about shortages of doctors, both general practitioners (GPs) and specialists, particularly in the less populated areas of New Zealand (NZ). Reflecting

these concerns, there have been a number of official reports on doctor shortages.<sup>1,2,3,4,5</sup> A variety of drivers, including the ageing of the wider NZ population and ageing of the medical workforce, suggest that the demand for doctors will continue

## CORRESPONDENCE TO:

Paul Callister  
Institute of Policy Studies  
PO Box 600, Wellington,  
New Zealand  
paul.callister@vuw.ac.nz

to grow in NZ. There is considerable literature to show that NZ is not alone in facing a shortage of doctors. Doctors are internationally very mobile and so NZ doctors seek opportunities overseas. But, equally, overseas doctors migrate to NZ.

Recent studies indicate that there have been major shifts in the composition of the medical workforce in NZ since the mid-1980s through changes in training of doctors and through migration flows. Two important changes have been the strong increase in the number of female doctors and a significant rise in the number of foreign-born medical staff.

The rise in the number of female doctors reflects an overall increase in women working in professional occupations. Both national and international research indicates that processes of assortative mating tend to bring together people with similar levels of qualifications.<sup>6</sup> One result of both these outcomes has been an increase in dual career couples.<sup>7</sup>

So how are doctors making decisions as to where to locate both nationally and internationally? Viewing doctors just as individuals (without partners or children) limits our understanding of location decisions. In terms of location, a number of drivers, including technology, are working to concentrate medical services in large urban areas. Partner choices may add to this concentration. If doctors' partners are increasingly well-educated and seeking careers, then this could result in well-educated 'power couples' increasingly seeking out large urban areas in which to live. Already we are seeing examples of couples seeking jobs in the same centre. In late 2008, Wellington Hospital filled its two vacancies for paediatric oncologists by recruiting a married couple who were 'looking for the same job in the same place'.<sup>8</sup>

Against a backdrop of the changing demographics of doctors in NZ, this paper presents initial data around three broad issues:

1. Whether migrant doctors are coming to NZ independently (unaccompanied) or as part of a couple.
2. How the living arrangements of doctors changed between 1986 and 2006.

3. If doctors are part of a couple, how the educational and employment status of their partners has changed over this time period.

## Method

This exploratory study is based primarily on census data from 1986 through to 2006. The other main data source is immigration data collected by the Department of Labour. Immigration data is collected through the Department of Labour's Application Management System (AMS). While the census data cover the period 1986 to 2006, the starting point for the migration data is 2002/03. This time period was not only chosen to illustrate recent migration trends, but also because this was when the Skilled Migrant Category (SMC) was introduced. Some data from the Household Labour Force Survey (HLFS) are also used. Robert Didham accessed the census data and Juthika Badkar accessed the Department of Labour data. The HLFS data is available via Statistics New Zealand's website.

While some data are presented on GPs separately from total doctors, due to small numbers and confidentiality concerns most of the data do not separate out GPs.

This paper summarises a more detailed working paper. This includes a review of recent studies of the NZ medical workforce.<sup>9</sup>

## Findings

### Individuals

While there is a concern about shortages of doctors, the number has increased quite significantly since 1986 when the census indicated there were 5826 doctors working in NZ (2775 GPs and 3051 specialists). By 2006, there were 10 470 doctors, comprising 4011 GPs and 6459 specialists.

Table 1 shows the changing mix of doctors in NZ by both sex and country of birth over the time period 1986–2006. In total, women as a proportion of all doctors rose from 22% in 1986 to 40% in 2006. Equally, foreign-born doctors rose from 36% in 1986 to 52% in 2006. The figures of half being born overseas is similar for GPs and specialists.

In 1986, women formed 17% of NZ-born GPs, but this had risen to 41% by 2006. Equally, in 1986 women formed 24% of overseas-born GPs and again rose to 40% by 2006. The growth in the number of women working as doctors reflects the overall increase in the proportion of women in paid work. HLFS data indicate that just over half of women aged 15 and older were employed in March 1986, but this rose to nearly 60% by March 2006.

Migration flow data for both permanent and temporary migration of doctors shows that around

### WHAT GAP THIS FILLS

**What we already know:** In studies of the New Zealand medical workforce, including those examining ways of overcoming local doctor shortages, doctors are generally considered as individuals.

**What this study adds:** Many doctors have partners; these partners tend to be well-educated and many partners are employed. This suggests that location decisions of doctors, nationally and internationally, often may be made by couples both seeking careers rather than just individuals looking for opportunities. Policy makers at local and national levels need to be aware of these issues when recruiting doctors.

Table 1. Number of NZ- and foreign-born doctors working in NZ; 1986–2006

	1986	1991	1996	2001	2006
Male NZ-born	2934	2970	2799	3057	3024
Female NZ-born	777	1101	1377	1722	2013
Male overseas-born	1599	2025	2325	2769	3288
Female overseas-born	507	762	1002	1458	2109
TOTALS	5817	6858	7503	9006	10 434

Source: Statistics New Zealand

Table 2. Top 6 nationalities of medical doctors approved as principal applicants for residence through the Skilled/Business stream and number of approved medical doctor work applications—top 6 nationalities, by gender, 2002/03 to 2006/06 combined

Skilled/Business stream				Temporary work category			
Nationality	Sex	n	Women as % of total	Nationality	Sex	n	Women as % of total
Great Britain	Female	193	45.3	Great Britain	Female	1511	49.0
	Male	233			Male	1570	
South Africa	Female	61	38.1	South Africa	Female	202	36.1
	Male	99			Male	358	
Malaysia	Female	35	41.7	Malaysia	Female	128	47.4
	Male	49			Male	142	
India	Female	13	20.6	India	Female	38	12.5
	Male	50			Male	266	
USA	Female	17	26.6	USA	Female	187	28.7
	Male	47			Male	464	
Other	Female	61	28.1	Other	Female	402	31.4
	Male	156			Male	877	
TOTAL		1014				6145	

Source: Department of Labour

40% of applicants are female. However, when nationalities are considered, there are some differences. Just under half of applicants from the United Kingdom (UK) and Ireland, but only 21% of permanent and 13% of temporary applicants from India, were female (Table 2).

Of those foreign-born doctors working in NZ, the 2006 census indicates that the largest number have come from UK and Ireland (1836), followed by Asia (1440) and then South Africa (699), the rest of Europe (351), North Africa/Middle East (240), Australia (231), North America (210), the Pacific (201) and Sub-Saharan Africa (162).

### Couples

While legal marriage has become less popular, partnering is still popular in NZ. Overall, of the population aged 20 and older, in 2006, 70% of employed women and 73% of employed men were partnered and either living with a legal spouse or with a de facto partner. Not surprisingly, in 2006, a significant proportion of both male and female doctors had partners. For male doctors there has been little change between 1986 and 2006, with the rate shifting from 82% to 84% in 2006. For female doctors there has been a stronger rise, but from a lower base. Of the 22%

Table 3. Percentage of male and female doctors who were partnered in each main geographic area; 2006

	Male	Female	Total
Main urban area	83	69	77
Other urban area	87	70	82
Rural	90	85	88
<b>TOTAL</b>	<b>84</b>	<b>70</b>	<b>79</b>

Source: Statistics New Zealand

of doctors who were female in 1986, 62% of them were partnered. By 2006, of the 40% of doctors who were female, 70% were partnered.

Table 3 shows a geographic breakdown of partnering amongst doctors living in NZ in 2006. Table 4 shows that both male and female doctors who lived in rural areas were the most likely to be partnered. Female doctors in main urban areas were the least likely to be partnered. This may be partly an age-related effect, but it is also possible that rural practice for women is more attractive if they are part of a couple where their partner is strongly linked into the rural community.

When overall partnering rates for male and female doctors are considered in relation to country of birth, there are some variations. For women

Table 4. Number and percentage of medical doctors approved for residence through the Skilled/Business stream independently and with secondary applicants by gender, 2002/03 to 2006/07 combined

		Female principal applicant		Male principal applicant	
		n	%	n	%
UK	Independent	114	57	77	32
	With secondary applicants	85	43	164	68
South Africa	Independent	19	31	26	25
	With secondary applicants	43	69	76	75
Malaysia	Independent	33	85	43	84
	With secondary applicants	6	15	8	16
USA	Independent	5	29	12	25
	With secondary applicants	12	71	36	75
India	Independent	3	21	11	21
	With secondary applicants	11	79	42	79
TOTAL	INDEPENDENT	208	52	211	31
	WITH SECONDARY APPLICANTS	194	48	476	69

Source: Department of Labour

the highest partnering rate is amongst those born in the UK/Ireland (76%) or other Europe (77%), while the lowest is amongst those born in Asia (58%). Again, a wide range of factors may influence this.

Internationally, there has been major growth in the number of women migrating independently and doctors are no exception. Table 4 shows medical doctors approved for residence through the Skilled/Business stream independently and with secondary applicants. If female doctors are the principal applicant, then just over half propose to migrate independently. For male doctors less than a third aim to come to NZ independently. However, again there are some significant differences by country. This pattern of women coming independently but men with a partner shows up strongly amongst doctors applying from the UK. From South Africa, India and the USA, both men and women tend to come as couples, while from Malaysia it is common for both male and female doctors to come independently.

There has been an increase in the proportion of all couples where both partners are in paid work. HLFS data show that, in March 1986, 57% of couple-only households had both partners in paid work. This rose to 74% by March 2006. As an illustrative child-rearing couple, the same data source indicates that 59% of couple households with two dependent children had both partners in paid work in March 1986. This had risen to 66% by March 2006.

Table 5 shows the proportion of couples where both were in paid work and, where the partner was in paid work, selected occupations of the partners of male and female doctors in 1986 and 2006. This table primarily tests the idea that in the past a significant proportion of male doctors had a nurse or teacher as a partner, but that pattern has declined over time. Table 6 also examines the changing partnering choices for female doctors. The category not-in-paid-work includes parents at home looking after children.

A number of patterns stand out. First, in both 1986 and 2006 a greater proportion of partners of male doctors were not in paid work than partners of female doctors. Second, in 1986 a small but

Table 5. Selected occupations of partners of male and female doctors; 1986 and 2006

	Male doctors		Female doctors	
	1986	2006	1986	2006
Not in paid work	30.9	28.9	6.3	12.9
GPs	4.7	7.5	18.3	10.2
Other doctors	4.1	8.1	23.8	18.3
Total doctors	8.8	15.6	42.1	28.5
Nurses and midwives	13.5	9.1	0.8	0.9
Lawyers	0.4	1.6	4.2	2.4
Teachers	4.7	4.1	3.8	2.6
TOTAL SPECIFIED	3438	4791	720	2619

Source: Statistics New Zealand

significant proportion of male doctors had a nurse as a partner, but nearly 9% of partners were also doctors. By 2006 the proportion of partners of male doctors who were also doctors was higher than nurses. For female doctors the changes are more dramatic. In 1986, of the smaller proportion of female doctors who had a partner, 42% had a doctor as a partner. By 2006 this had reduced to 29%, suggesting that proportionately there were fewer male doctors to marry. However, this is still significantly higher than for male doctors. Also not surprising given the very small number of male nurses, only a few female doctors have nurse partners. Overall, the data indicate a significant proportion of doctors have a partner who also works in the medical field (not shown are the other health professions such as dentists and pharmacists). Also of interest is that following overall societal trends that slightly fewer male doctors have a partner not in paid work, there has been an increase in the proportion of partners of female doctors not in paid work. Some are likely to be 'house-husbands', some will be studying, but some may be new migrants unable to find paid work.

When 2006 data are considered for male and female GPs, male GPs were slightly less likely to have a doctor partner than the total rate (13.8% had a doctor partner), but female GPs were slightly more likely to have a doctor partner (30.7%). In 2006, if a male GP had a doctor partner, then 76% of them were also GPs. For women GPs only 56% were also GPs.

Table 6. Birthplace of both partners for doctor couples and all New Zealand couples; 2006

Couple combination		Both doctors		Both GPs		All couples	
		n	%	n	%	n	%
NZ-born male	NZ-born female	219	30	60	31	510 657	63
NZ-born male	OS-born female	108	15	36	18	72 489	9
OS-born male	NZ-born female	69	10	24	12	72 327	9
OS-born male	OS-born female	327	45	75	38	156 834	19
TOTAL SPECIFIED		723	100	195	100	812 307	100

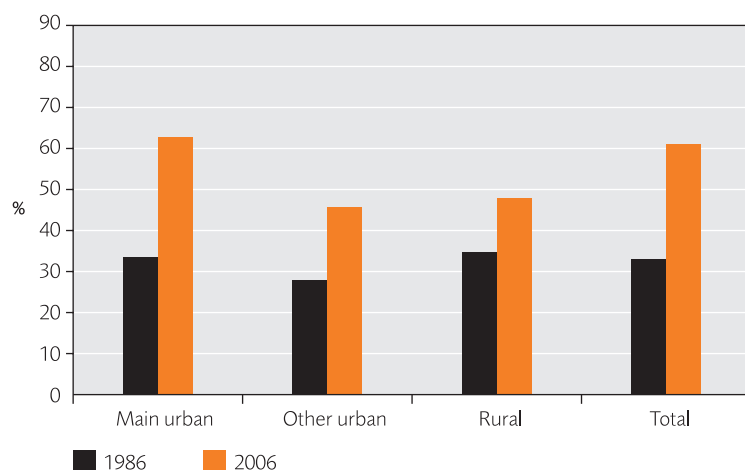
Source: Statistics New Zealand

OS = overseas-born

In a study of NZ's diaspora, it was found that many New Zealanders living overseas had partners who were not from NZ.<sup>10</sup> This affected intentions to come 'home', as NZ is not home for one partner. This situation is played out in a NZ context as well. Table 6 focuses just on couples where both partners are doctors as well as the subset of both being GPs and considers the birthplace of both. The highest proportion of medical couples (45% for total doctors and 38% where both were GPs) were both born overseas. As the case study of the paediatric oncologists who joined the staff of Wellington Hospital in 2008 illustrates, the overseas-born doctors may also have been born in different countries, in this case the USA and Germany.<sup>11</sup>

Just under a third of couples were both born in NZ. A greater number of doctor couples have a NZ-born male partner and overseas-born female partner than vice versa. Some of these cross-national couples will have met when a New Zealander was travelling overseas, and some relationships will have formed when foreign doctors formed romantic ties with local doctors. Cross-national partnering is becoming more important internationally and so it is not surprising to see this pattern amongst doctors. If one partner is firmly attached to NZ, perhaps by being born here and having parents or other relatives living in NZ, such partnering has the potential to 'glue' foreign doctors to NZ. But equally it means that a significant number of locally-born doctors have a link to foreign countries.

Figure 1. Percentage of partnered male doctors in each geographic location whose partner held a degree or higher qualification; 1986 and 2006.



In this last section we focus on changes in highest level of education of the partners of male and female doctors. We begin with male doctors. Figure 1 shows the proportion female partners of male doctors who held a degree or higher qualification for three main geographic areas. Not shown is that in both years a very small proportion of partners of male doctors reported having no formal qualifications (4% in 1986 and 1% in 2006). Figure 1 shows that there was a large growth in the proportion of male doctors who had a partner who also held a degree or higher qualification. In 1986 a third of male doctors had a partner with a degree or higher, but by 2006 this had nearly doubled to 61%. Also of interest is that the strongest rise in the dual degree couples was in main urban areas. In 2006, 63% of partners of male doctors living in urban areas held



a degree or higher qualification, compared with just under half living in rural areas.

Figure 2 shows that in both 1986 and 2006 female doctors were more likely than male doctors to have a partner with a degree or higher qualification. It also shows some 'marrying down' educationally of female doctors between 1986 and 2006, a phenomenon facing younger women generally given that well-educated younger women now significantly outnumber well-educated men.<sup>12</sup> However, like male doctors, for female doctors in couples there is a concentration of education in main urban areas in 2006, with 79% both holding degrees in main urban areas as against 59% in rural areas.

The data on education levels of couples where one partner is a doctor support the hypothesis that well-qualified couples have a greater propensity to live in main urban areas. Whether this is because large urban areas better support dual careers or whether it is due to other factors requires further research.

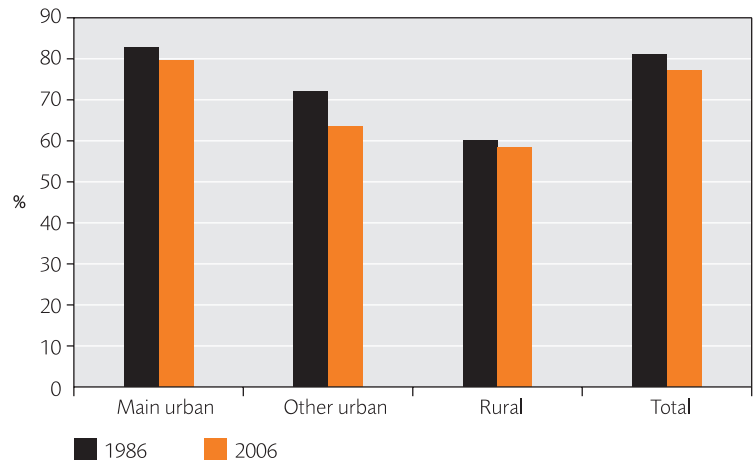
## Discussion

Most studies of doctors consider them as individuals. This includes the 2008 report *The Future of the Medical Workforce*.<sup>13</sup> In our exploratory paper, we consider some of their living arrangements including the education and labour force status of partners. Our finding suggest that it should not only be readers of Mills and Boon-type novels who are interested in the romantic attachments of doctors, but also researchers, policy makers, local communities and all other groups trying to understand how to attract and retain doctors (and other 'in-demand' professionals) in NZ. As simple examples, recruiters may need to think about ways to find two jobs in a community rather than just one and, particularly if couples have children, ways of supporting the work-life balance of both partners.

## Limitations

This paper examines the outcomes of decision-making about location and employment for couples. It does not tell us how location decisions were actually made. Other methods, such as

Figure 2. Percentage of partnered female doctors in each geographic location whose partner held a degree or higher qualification; 1986 and 2006.



qualitative research, would be needed to better understand decision-making processes.

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## ACKNOWLEDGMENTS

We would like to thank the Foundation for Research, Science and Technology for funding this research and are grateful for support given by Statistics NZ and the Department of Labour. However, the views, opinions, findings, and conclusions expressed in this paper are strictly those of the authors and not their employers.

## COMPETING INTERESTS

None declared.