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New Zealand Rural General Practitioners 1999 Survey—Part 2: gender issues

Ron Janes, Raina Elley, and Anthony Dowell

Aims To compare and contrast the demographic and working characteristics of female and male rural general practitioners (GPs) in New Zealand, and to highlight issues specific to female rural GPs.

Methods Anonymous postal questionnaires were sent to 559 rural GPs in November 1999.

Results Completed questionnaires were returned by 417 rural GPs (75%). Of the 338 rural GPs who fulfilled the inclusion criteria, 93 (28%) were female. Eighty percent of female rural GPs were younger than 45 years of age compared with 53% of male rural GPs ($p < 0.01$). Women were less likely to be in full-time practice (45% vs 90%) or own their own practice (63% vs 83%) ($p < 0.01$). Concerns about locum scarcities, overwork, excessive on-call, bureaucratic demands, and GP shortages were equally important to both genders—while issues of security, accreditation, and combining work and family were mentioned by female GPs.

Conclusions Most of the quantitative gender differences could be explained by the female rural GPs being younger (80% in their child-bearing years). Recognising and addressing the specific difficulties faced by part-time female rural GPs, such as by providing more flexible work options, would create a more favourable environment, likely to retain and recruit more women.

The present critical workforce shortage in New Zealand rural general practice[1] mirrors the situation in many other countries.[2–4] Historically, rural general practice has been an almost exclusively male occupation that has been unattractive to female general practitioners (GPs). With women now making up nearly half of the graduating doctors in New Zealand, it is imperative that rural medical practice restructures to attract women into the profession.

The ‘Calgary Commitment to women in rural family medical practice’, adopted at the 4th WONCA World Rural Health Conference, stated as one of its principles, ‘Rural medical practice must be structured to reflect the way women experience their lives’.[5] The conference also committed ‘to continue the essential work of restructuring rural practice to attract women’.[5] Indeed, the current workforce crisis would suggest that even male graduates are avoiding certain areas such as rural general practice. Restructuring rural practice to attract more female GPs may also attract more male GPs.

The New Zealand Rural General Practitioners 1999 Survey[1] is the first national survey of rural GPs since 1986.[6] Although the percentage of female rural GPs has increased from 16.8% to 27.8% over that time, this is still well below the percentage of total female GPs in New Zealand (36%).[1,6] Shortages of rural female GPs have been documented internationally.[7–9] Surveys of rural communities, patients, and GPs, from Australia and the United States, have found that one priority for improving

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quality of rural health delivery is to have more female rural practitioners.[10,11] Countries such as Australia have conducted surveys that describe the working characteristics and needs of the female rural GP workforce to inform future planning.[9] An essential finding is that women and men have different experiences during their medical careers.[9] Women often have cyclical and interrupted careers, which reflect their other roles, especially as mothers,[9] and they often see a different profile of patients and problems.[12]

The New Zealand Rural GPs 1999 Survey was carried out to obtain accurate information about the rural workforce,[1] including an analysis of sub-groups within the workforce. The aim of this paper is to compare and contrast the demographic and working characteristics of female and male rural GPs, and to highlight issues specific to female rural GPs. It is hoped that this information will guide the restructuring of rural general practice in New Zealand, so that it retains and recruits adequate numbers of female rural GPs to meet the needs of rural communities.

Methods

Anonymous postal questionnaires were mailed out in November 1999 to 559 GPs identified as rural or semi-rural from a database compiled by one of the authors.[13] Non-responders were initially posted a reminder card in December, a reminder questionnaire in January 2000, and a further reminder, by telephone or facsimile, a month later. Inclusion criteria comprised a 'rural ranking score (RRS) of equal or greater than 35 points' and 'currently working as a GP in New Zealand'. A detailed description of methods is presented elsewhere.[1]

Quantitative data was entered into an Access database. Epi Info software was used for analysis. Chi-square tests were carried out to detect statistically significant differences in demographic and practising characteristics between male and female rural GPs.

Written comments were obtained from responses to an open-ended question that asked rural GPs 'for any further comments or suggestions about rural general practice'. These written responses were read multiple times (to detect common themes) by two of the authors, independently. Issues specific to female rural GPs were identified from the written comments and disagreements in interpretation between authors were resolved by discussion.

Results

Of the 559 rural and semi-rural GPs, 417 returned completed questionnaires (75%). Seventy-four GPs had a RRS of less than 35 and five had not completed the RRS, leaving 338 valid questionnaires. Of these 338 questionnaires, 93 were from women, 242 were from men, and 3 GPs did not answer the question on gender. As the original address database did not contain information about gender, the response rate for women could not be compared with that for men.

Quantitative data Table 1 shows the demographic and working characteristics of the female and male rural GPs, with the respondents for each question used as the denominator. Women were significantly younger and more likely to be working part-time. In fact, 33% of women worked five tenths or less compared with only 4% of men ($p < 0.001$). Women were more likely to use computers in the surgery and to consider there were sufficient GPs in their area. They were less likely to own a practice and have access to email at home.

Rural GPs were asked to rate the importance of various problems affecting rural practice (not important, important, very important). Table 2 lists the problems and the percentage of female and male rural GPs who considered them as 'very important'. At least 30% of both women and men agreed that 'lack of locum relief for CME' and

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'holidays', 'on-call workload is too great', and 'shortage of rural doctors' were all "very important' problems. Women were significantly more likely to list 'difficulties with accreditation' as a 'very important' issue.

Table 1. Characteristics of the NZ rural GP workforce (by gender)

Characteristic	Female: n (%)	Male: n (%)	P value
Age (Under 45 years of age)	74/93 (80)	127/241 (53)	0.000†
Ethnicity:			
- European	76/89 (82)	199/232 (86)	0.3
- Maori	1/89 (1.1)	3/232 (1.3)	
- Pacific	2/89 (2.1)	7/232 (3.0)	
- Asian	10/89 (10.8)	21/232 (9.1)	
- Other	0	2/232 (0.9)	
Practising in North Island	46/91 (51)	146/239 (62)	0.10
Isolation (RRS‡ > 55)	30/93 (32)	105/242 (43)	0.08
Consider number of GPs in area is insufficient	20/87 (23)	88/231 (38)	0.02*
NZ graduate	49/93 (53)	109/241 (45)	0.3
GP vocationally trained	57/90 (63)	139/239 (58)	0.5
Full-time practice	38/89 (43)	214/238 (90)	0.000†
Rural hospital duties	33/88 (38)	98/238 (41)	0.6
Intra-partum obstetrics	13/91 (14)	58/235 (25)	0.06
Own their practice	58/92 (63)	200/240 (83)	0.000†
Medical Council of NZ status:			
- Oversight and probationary registration	1/92 (1.1)	7/235 (2.9)	0.07
- Oversight and general registration	21/92 (23)	35/235 (15)	
- Independent, no vocational registration	27 (29)	48/235 (20)	
- Independent and vocational registration	43 (47)	143/235 (61)	
- Independent and temporary registration	0	2/235 (0.9)	
Royal NZ College of GPs status:			
- Not a member	13/91 (14)	52/238 (22)	0.001†
- Participating in accreditation	39/91 (43)	48/238 (20)	
- Participating in MOPS§	33/91 (36)	115/238 (48)	
- Member but not participating in accreditation or MOPS	6/91 (6.6)	23 (9.7)	
Rural GP Network membership	42/91 (46)	118/230 (51)	0.5
NZ Medical Association membership	45/92 (49)	143/233 (61)	0.05
IPA# membership or other collective	71/91 (78)	173/234 (74)	0.5
Email access at home	58/93 (62)	182/240 (76)	0.02*
Email access at surgery	38/92 (41)	116/239 (49)	0.3
Computerised appointments	70/93 (75)	148/242 (61)	0.02*
Computerised consultation (at least some part)	46/93 (49)	77/242 (32)	0.004†
Expecting to still be in their current practice in 1 year's time	83/92 (90)	209/237 (88)	0.4
Expecting to still be in their current practice in 3 year's time	68/90 (76)	165/226 (73)	0.2
Expecting to still be in their current practice in 5 year's time	43/90 (48)	118/219 (54)	0.5

*Significant at a $p < 0.05$ level; †Significant at a $p < 0.01$ level; ‡RRS refers to Rural Ranking Scale; §MOPS refers to Maintenance of Professional Standards; #IPA refers to Independent Practitioners' Association.

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Table 2. Percentage of female and male rural GPs who ranked the current problems affecting rural GPs as 'very important' to them

Current problems affecting rural GPs	Female GPs n (%)	Male GPs n (%)	P value
Lack of locum relief for holidays	51/91 (56)	147/236 (62)	0.3
Shortage of rural doctors	35/91 (38)	90/235 (38)	0.9
Lack of locum relief for CME*	32/89 (36)	99/235 (42)	0.2
Difficulties with accreditation	31/86 (36)	47/216 (22)	0.005‡
Lack of quality rural CME	29/91 (31)	56/233 (24)	0.2
On-call workload is too great	27/89 (30)	90/235 (38)	0.2
Need for upskilling in trauma/ emergency care	25/92 (27)	36/233 (15)	0.06
Difficulties with MOPS† (reaccreditation)	13/78 (16)	32/204 (16)	0.3
Need for upskilling in rural hospital work	11/90 (12)	24/229 (10)	0.7
Daytime workload is too great	10/87 (11)	32/236 (14)	0.5
Difficulties with being supervised	5/86 (5.8)	10/225 (4.4)	0.5
Increased workload from supervising others	2/85 (2.4)	5/223 (2.2)	0.2

*CME refers to Continuing Medical Education; †MOPS refers to Maintenance of Professional Standards; ‡Significant at a $p < 0.05$.

Written comments Forty-one women (44%) and 96 men (40%) provided written comments to the open-ended question asking for 'comments or suggestions about rural general practice'. The positive and negative themes from these written comments, as well as the suggested solutions for rural general practice, have been analysed for a separate paper in this issue.[14]Reading the written comments for similarities and differences between genders, showed that both female and male rural GPs identify many similar concerns. The excessive workload, including frequent on-call (duty), large patient lists, excessive paperwork, and lack of locums, were all identified by both genders as being of significant concern.

There were a few issues that appeared to be unique or of greater concern to female rural GPs, although the number of comments were few. These issues were completing accreditation, security when on-call, seeing a different range of patient problems, and the impact that being a rural GP has on their families (especially when both spouses were GPs). Five women (12%) wrote long detailed comments on the effects of their workload on their families. These issues are illustrated by the quotations below, with any identifying items (e.g. town names) removed.

Security:

'Problems for me being female, on-call and covering a large area. Security worries me. I do not want to do house or surgery visits on my own after dark'

Accreditation:

'Commitment to Accreditation etc is frustrating – time that I don't feel I have – not gaining anything for me'

Different range of patient problems:

'Other problems related to being a female GP: (not necessarily a rural problem but fewer outside resources aggravate it)…more patients with lists, more patients needing nurturing type consultations. In a fee for service environment, this penalises us'

Family:

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'On a bad day I feel trapped by a very heavy workload, disruption to family life…I feel my family suffers'

'For women, they are usually married to professional men and the job opportunities for them are few in rural areas making it difficult to attract women to rural areas—schooling in (this area) is poor'

Families with two GPs:

'Job sharing does reduce the practice workload and therefore allows women to work in rural practice when as mothers they otherwise might not'

'We have found major problems in both completing CME. It causes twice as much disruption of the family as we both have to attend separately. (On a 1:3 roster, this does not give us much time together.) If we both attend a one-day conference, the travelling time involved (2 hours) each way means finding a baby sitter for nearly 12 hours and one who is prepared to start at 7am, not a practical option'

'Biggest stress factor is 'on-call'. 1 in 2 practice but partner is also my husband so effectively 1 in 1 so lots of problems associated with this'

(Not one male GP commented on the difficulties of having a spouse who was also a GP.)

Discussion

This is only the second national survey of New Zealand rural GPs, and the first to analyse gender differences. While the survey results were collected 4 years ago (December 1999 to March 2000), the stability of rural health care continues to be fragile with workforce shortages still common in many localities.

Female rural GPs were significantly younger, with 80% under 45 years of age, compared with 53% of male rural GPs. There were a number of other significant gender differences that the younger age of women would seem to explain: women were more likely to be undertaking accreditation, which requires RNZCGP membership, and were less likely to be working full time. In fact, 33% of women worked five tenths or less compared with only 4% of male rural GPs. Women were also less likely to own their own practice, had less access to email at home, but were more likely to use computers at the surgery for appointments and clinical notes. The younger age of the women presumably meant they were more likely to have young families and fewer financial resources.

Being younger may have meant they were more comfortable with information technology, when compared with the male GPs. Women were also less likely to state that more GPs were needed in their area, suggesting that either women are attracted to areas without workforce shortages or certain areas are better able to attract female GPs thereby preventing shortages. Over 50% of both male and female GPs rated 'lack of locum relief for holidays' as 'very important', the highest percentage for any of the problems. Significantly, more female GPs rated 'difficulties with accreditation' as a 'very important' problem, compared with male GPs.

Quantitative surveys, however, often miss significant gender differences.[15] When the answers to open-ended questions are examined, other differences are frequently revealed.[15] This was possibly true in this study, as more female GPs expressed concern about the impact their job was having on the family, and their comments

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were much more detailed. Additional related issues such as childcare, children's education, opportunities for spouses, juggling on-call duty with family responsibilities, and being able to spend holidays with family were only mentioned by women. It is possible that men share these concerns to the same degree as women, but were reluctant to express themselves in writing. Alternatively, the men were older and as such their children were more likely to have left home. As this was a small sample, further research is needed.

According to the literature, family issues are a common source of stress for female GPs. A study of 1800 GPs in England found that the most significant predictor of female GPs' mental health was the stress of the job interfering with family life, which was the least important predictor for male general practitioners.[16] This issue is magnified in rural practice where female GPs also juggle the demands of long hours, on-call duty, and lack of locum relief for holidays or study breaks. Similar findings have been found in other studies of female rural general practitioners.[9,17,18] This unique gender difference of female GPs, in having cyclical and interrupted careers due to their other roles, especially as mothers, needs to be acknowledged and valued.

The 'difficulties with accreditation' found in the quantitative results were reiterated by written comments from a few female GPs. Again, these concerns may reflect the younger age of women and the slightly higher proportion of women still undergoing accreditation, compared with the men. However, they also expressed that the accreditation obligations were more disruptive, which may be due to women working part-time with significant family responsibilities.

A few women in the present study were also concerned about the demands placed on female GPs within consultations. They talked about the greater emotional load with its consequent added time pressure and adverse affect on income within the fee for service system. International research has found that female doctors attract more patients with time-consuming psychosocial problems, yet have the same number of complex medical patients as male doctors, resulting in lower incomes.[12] Other research found that when 'medical problem' was controlled for, or patients were randomly assigned, female GPs spent no more time with patients than their male counterparts.[19] These findings suggest the gender differences in consultation patterns are at least partly due to the type of patient that chooses to see a female GP, rather than a style of consulting.[19]

To address the concerns of female rural GPs, there may be a need for greater flexibility in work conditions, such as more salaried positions (full and part-time), more use of distance education, and providing additional payment for longer mental-health related consultations. In addition, GPs in part-time practice need proportional on-call and more flexible GP training (including both registrar and accreditation years). Expanding the present Rural GP Network locum scheme, providing payment for time on-call, and making a concerted effort to reduce the bureaucratic burdens of general practice would improve working conditions for all rural GPs.

In conclusion, the results of this survey, the first to examine gender differences in New Zealand rural general practice, have confirmed the international literature: women are under-represented in rural general practice, and those present are, on average, younger than the men. The written comments did suggest there are some specific issues for female rural GPs: security when on-call, completing accreditation,

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longer consultations, and combining rural general practice with family life. These differences, especially related to the family, reflect both women's and society's expectations, priorities, and values—and should not only be acknowledged and respected, but also valued.

These New Zealand results add strength to the WONCA recommendations stating that rural practice needs to be restructured now to meet the particular needs of female GPs (if we want to retain and recruit more of them). In so doing, we are also likely to create a more attractive environment for male new graduates as well. Indeed, the viability of medical services in rural New Zealand and the mental health of the current rural GP workforce may well depend on these improvements.

Author information: Ron Janes, Associate Professor of Rural Health, Department of General Practice and Primary Health Care, Auckland University, Auckland—and The Institute of Rural Health, Hamilton—and rural GP, Wairoa Medical Centre, Wairoa, Hawkes Bay; C Raina Elley, Senior Lecturer; Anthony Dowell, Professor, Department of General Practice, Wellington School of Medicine, Otago University, Wellington.

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Correspondence: Associate Professor Ron Janes, PO Box 341, Wairoa 4192, Hawkes Bay. Fax: (06) 838-3729; email: ronjanes@xtra.co.nz

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