Contamination of interventional research is possible through GP membership of more than one division

Sandy Middleton, Jeanette Ward

Sandy Middleton, BAppSc, MN, FCN, (NSW), is a NH&MRC doctoral student, Division of Population Health, Central Sydney Area Health Service and School of Public Health, University of Sydney, New South Wales.
Jeanette Ward, MBBS, MHPEd, PhD, FAFPHM, is Director, Division of Population Health, South Western Sydney Area Health Service, New South Wales.

INTRODUCTION General practice divisions were promoted in the 1990s to provide support for general practitioners. Membership patterns are not well understood and may have implications for research and health services development. METHODS Within a postal questionnaire conducted in 1999, we determined self reported membership of divisions. RESULTS We obtained a 60% response rate (n=296) from a random sample drawn from all New South Wales GPs. The majority of GPs (n=204, 69%) belonged to one division. Thirty respondents (10%) did not belong to any division. Fifty-nine GPs (20%) belonged to two or more divisions, women GPs (n=27, 31%) significantly more than men (n=32, 16%) (P=0.002), and GPs with city or metropolitan area practices (n=52, 24%) were significantly more likely than rural or remote GPs (n=7, 9%) (P=0.005) to belong to two or more divisions. DISCUSSION If divisions are used as the unit of randomisation for interventional research, there is risk of contamination in study design. Articles reporting such trials should acknowledge this.
Table 1. GPs’ self report of division of general practice membership

<table>
<thead>
<tr>
<th>Number of divisions</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>One</td>
<td>204</td>
<td>69</td>
</tr>
<tr>
<td>Two</td>
<td>53</td>
<td>18</td>
</tr>
<tr>
<td>Three</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Unsure</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>296</td>
<td></td>
</tr>
</tbody>
</table>

shown in Table 1. Thirty (10%) respondents did not belong to any GP division. This proportion is significantly lower than the proportion of NSW nonmember GPs in 1996 (20%) (P<0.001) (data from previous research), and the proportion reported by the Annual Survey of Divisions that estimated, nationally at least (no state based data were available) that 18% of GPs were not members of a GP division (P<0.001).

Membership of any GP division was not significantly associated with GP gender (88% of men versus 93% of women) (P=0.22); but was associated with membership of the AMA, (95% of GPs were members of the AMA versus 85% of GPs who were not) (P=0.007). General practitioner age, type of employment (full time versus part time), practice type (solo practitioner versus group or partnership), membership of the AMA, Fellowship of the RACGP, graduate of the RACGP Training Program, and possession of professional indemnity insurance were not significantly associated with multiple divisional membership.

Discussion

Membership of divisions in NSW appears to be increasing with time. This may be due, in part, to an increased responsiveness of divisions to the needs of GPs.

We identified gender bias in multiple divisional membership, with women GPs significantly associated with multiple divisional memberships. Reasons for this are unclear. Our finding that urban GPs also are more likely to belong to more than one GP division when compared with their rural colleagues is likely explained by contiguous divisional boundaries or little awareness of the discrete roles and functions divisions offer to local members.

These findings have important implications for GP research. While there is an obvious methodological advantage in interventional research to randomise divisions rather than individual GPs to different interventions, such studies will be contaminated as a result of membership of multiple divisions. Publications of such trials should acknowledge this possibility.

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References


Correspondence

Professor Jeanette Ward
Director, Division of Population Health
South Western Sydney Area Health Service
Locked Bag 7008
Liverpool, NSW 2170
Email: Jeanette.Ward@swsahs.nsw.gov.au