Patterns of general practitioner usage among Pacific people: indicative results from the Waikato Medical Care Survey 1991-2

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Abstract

Aims. To report patterns of medical contact in a representative sample of Pacific people attending the general practitioner.

Methods. The data were drawn from a survey of general practice in the Waikato region representing a one per cent sample of all weekday encounters. In total, 12,833 patient encounter forms were completed. Just over one per cent of all encounters were recorded for patients of Pacific Islands background.

Results. Rates of medical contact for Pacific patients were lower - 3.4 visits per year versus 4.5 for the whole sample - fewer follow up visits were requested (71% versus 76.2%), presentation was delayed (4.9 days from onset versus 3.7 for the sample) and there was an apparently lower level of rapport achieved.

Conclusion. Overall levels of medical contact and return visits among Pacific patients appear to be lower and presentation delayed in this Waikato sample.

From tiny beginnings in the immediate post war period, the community of Pacific people in New Zealand has grown in size and importance - particularly since the 1970s - until it now accounts for about five per cent of total population. Despite a long and distinguished record of research on the health experience of Pacific people, little broadly representative work has been carried out on patterns of general practitioner usage for this community. While specific studies have been carried out on individual island groups or on small samples of service users, apart from the New Zealand Health Survey, no research has been conducted describing the characteristic patterns of medical contact among Pacific people, particularly in primary care.

Methods

Study site. The data for this paper were drawn from a survey of general practice carried out over the period September 1991 to August 1992 in a region covering the territory of the previous Waikato Area Health Board. The population of the region was 324,433 at the 1991 census, representing about 10% of the New Zealand total. In demographic terms the Waikato region can be said to provide a representative cross-section, but not a replica, of the country as a whole.

Data collection. The data for this study were drawn from the survey of general practice encounters that formed its central component. Encounters were selected in a two stage process designed to generate a one per cent sample of all week day general practice consultations in the Waikato region (including week day, after-hours consultations in accident and emergency practices). All 210 general practitioners and the three accident and emergency practices in the region were invited to administer the encounter report form to a representative sample of their patients. Each participating doctor was allocated a sample of patients, their age and gender profile, and an interview set according to estimated workload to produce a sample of 25 patients in each of four data collection weeks spread over a year. Eighty per cent of all practitioners and all three accident and emergency practices took part in the first phase of data collection. Overall, however, data collections were successfully completed in 60% of all possible participating general practitioner/weeks and all accident and emergency doctor/weeks. Data in this study are presented for 141 general practitioners and 3 accident and emergency practices; this amounted to 12,833 encounter forms.

Variables. Each patient encounter record was completed by the general practitioner at the time of the contact. A full account of sampling and data collection details, including a copy of the encounter form and a description of variable definitions, have been outlined elsewhere.

Statistical treatment. Because of the small size of the Pacific patient sub-sample - approximately 150 - data are not broken down by gender and, in general, the analysis that follows depends on summary results presented in age - and gender-adjusted form. Comparisons will be drawn for age - and gender-adjusted data for the sample as a whole, using the 1991 New Zealand census distribution as the standard population.

Statistical tests were not used in this paper; in part this is due to the small size of the Pacific sub-sample, but it is also because the clustered nature of the data means that the criterion for statistical independence within each doctor's sub-sample of patient encounters is not strictly met. Rates of medical contact were calculated using as the denominator the population usually resident and at home on census night 1991, and as numerator the one per cent sample of encounters suitably inflated to represent all week day encounters registered over the period of a year.

Results

Medical contact. Age-specific rates of medical contact are presented in Table 1 for three ethnic groupings and for the sample as a whole. Summary rates are also presented for all ages combined.

Table 1. Age specific rates of medical contact: average number of visits per annum, by ethnic group.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Pacific</th>
<th>Maori</th>
<th>European/Other</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>3.5</td>
<td>4.1</td>
<td>5.2</td>
<td>4.8</td>
</tr>
<tr>
<td>15-24</td>
<td>2.4</td>
<td>3.8</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>25-44</td>
<td>3.7</td>
<td>3.6</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>45+</td>
<td>3.5</td>
<td>4.3</td>
<td>5.3</td>
<td>5.2</td>
</tr>
<tr>
<td>All Ages (n)</td>
<td>3.3 (149)</td>
<td>3.9 (2047)</td>
<td>4.6 (19,637)</td>
<td>4.5 (12,833)</td>
</tr>
</tbody>
</table>

*Adjusted* by age and gender.

While overall the familiar U-shaped age distribution of medical contact is in evidence, rates of general practitioner usage for Pacific people are lower than they are for the other two ethnic groupings. This discrepancy is carried through for all age groups, except 25-44. An overall summary measure adjusting for the age and gender distributions of these groups confirms the pattern, with the Maori and Pakeha rates at 4.0 and 4.6 respectively, and the Pacific figure increasing only marginally to 3.4.

The process of care. In Table 2 data on the process of care are presented for Pacific patients and for the sample as a whole. Six indicators have been selected. The first two relate to previous utilisation and time since onset. Overall while there is little difference in the average number of visits for the previous year, Pacific patients seem to delay longer.

Also, two measures suggesting important contrasts in the diagnostic process between Pacific and other patients are tabulated: whether or not a general examination was carried out and the achievement of high rapport (as judged by the practitioner). In both cases Pacific patients show lower rates. Finally, while prescribing rates are very similar for Pacific and other patients, referral is higher and follow up requests are lower.
Table 2. Selected indicators of the process of care, for Pacific patients by age group and for adjusted totals.

<table>
<thead>
<tr>
<th>Aspect of care</th>
<th>Pacific patients - Age-specific</th>
<th>Adjusted**</th>
</tr>
</thead>
<tbody>
<tr>
<td>encounter</td>
<td>0-14 (n=66) 15-44 (n=69) 45+ (n=24)</td>
<td>Pacific (n=109)</td>
</tr>
</tbody>
</table>

Entering the Process of Care

Average number of visits last year

<table>
<thead>
<tr>
<th>Age group</th>
<th>Average number of visits last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>6.8</td>
</tr>
<tr>
<td>15-44</td>
<td>6.6</td>
</tr>
<tr>
<td>45+</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Median number of days since onset*

<table>
<thead>
<tr>
<th>Age group</th>
<th>Median number of days since onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>2</td>
</tr>
<tr>
<td>15-44</td>
<td>3</td>
</tr>
<tr>
<td>45+</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Achieving a Diagnosis

General examination: 23.1% 13.3% 9.4% 14.5% 18.9%
High rapport: 42.4% 47.3% 44.8% 42.0% 51.0%

Disposition and Outcome

Referred: 6.8% 13.9% 11.0% 11.6% 9.0%
Follow-up request: 73.4% 78.4% 57.3% 71.0% 76.3%

*New episodes of illness, first diagnosis only. **Adjusted by age and gender.

Discussion

The results reported here derive from a small sample of only 149 general practice patients of Pacific background, in a regional study, and before substantial changes in the structure and funding of health care. Yet, while the proportion of the population of Pacific descent is lower than the national average, its age structure is closely comparable. Also, there is evidence that the general practitioner community in the Waikato is not unrepresentative and that the overall level of medical contact recorded here is close to that estimated for the region in 1989/90. Furthermore, this overall rate of 4.5 contacts per capita per year — holds much the same relationship to that now recorded for the country as a whole after five years of extensive health restructuring.

Despite the small sample size and its regional character, the results of this survey for patients of Pacific background are indicative: the major deviations relate, first, to rates of medical contact and return visits and to patterns of presentation and, second, to aspects of the medical interview. On the first count it is noteworthy that the overall rate of medical contact and requests for follow up are both lower. Further, there is a discrepancy in days since onset. On the second count it appears that Pacific patients are less likely to receive a general examination and to achieve rapport.

There is conflicting evidence from available data about patterns of health service usage among Pacific people. For example, while a recent publication from the Public Health Commission notes that there was a general perception among Pacific people of under utilisation of health services, a South Auckland survey suggested higher rates of contact for Pacific people than both Maori and Pakeha, while results from the New Zealand Health Survey show little difference between Pacific and other respondents.

Nevertheless, the current study strongly indicates that there is indeed a difference in medical contact. There are a number of substantive explanations for the pattern of less frequent, and delayed, general practice usage among Pacific people recorded here. One reason may be that they use alternative sources of care not covered in this study, such as hospital accident and emergency departments.

A second set of explanations concerns the financial, organisational and cultural barriers that Pacific people face as a minority, migrant ethnic group. Finally, there is the impact of the visit experience itself on different ethnic groups.

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References:

Comparison of provision and need for publicly-funded personal health services

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Abstract

Aim. To determine whether health services have been purchased equitably according to population needs at the territorial local authority (TLA) level.

Methods. The project involved the mapping of different categories of personal health service expenditure onto TLA areas. The measure used to compare provision and need was the ratio of observed to expected expenditure. Need beyond weighted populations by age, sex, and ethnicity or community service card status was measured using standardised mortality ratios.

Results. The analysis did not suggest that the inverse care law was operating at the level of TLAs. There was no systematic bias against equity. However there is a good deal of scatter in the plots, some of which will be accounted for by data quality problems, and some of which is possibly due to inequitable purchasing.