Health service attendance patterns in an urban Aboriginal health service

Karen M Flegg, Christine B Phillips, Anne L Collins, Peter G Sharp, Meetali Kanagasundaram, Ray W Lovett and Marjan Kljakovic

ABSTRACT

Objectives: To describe the health service attendance patterns of urban Aboriginal and Torres Strait Islander (Aboriginal) Australians and make comparisons with those of the general Australian population.

Design and setting: General practitioner-completed survey of all attendances over two separate 2-week periods in 2006 at an urban Aboriginal health service in Canberra, which provides services for about 3500 patients per annum.

Main outcome measures: Standardised attendance ratios (SARs) for a range of health problems, using patients attending Australian general practice for the same reasons as the reference population.

Results: Patients attending the Aboriginal health service were significantly younger than the Australian general practice patient reference population. The most common conditions managed were psychological, encompassing substance misuse; psychological problems accounted for 24% of all attendances. Patients attending the Aboriginal health service had higher rates of attendance for psychological conditions (SAR, 2.14; 95% CI, 2.01–2.28), endocrine conditions (SAR, 2.44; 95% CI, 2.29–2.60) and neurological conditions (SAR, 2.90; 95% CI, 2.71–3.09), as well as for circulatory, digestive and male and female genital conditions, than the reference population. Patients attending the Aboriginal health service had significantly lower attendance rates than the Australian population for respiratory illnesses, and conditions related to eyes or ears.

Conclusions: At this urban Aboriginal health service, attendance patterns reflected complex health care needs that are different from those expected of a population of this age. Urban Aboriginal health service attendance appears to reflect significant ill health among the patients, aligning more with Aboriginal health statistics nationally rather than health statistics for urban non-Aboriginal Australians.

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Health inequalities are a significant issue for Aboriginal and Torres Strait Islander (Aboriginal) Australians.[1] Many of the data relevant to this problem are derived from people living in rural or remote areas.[2,3] In 2006, although 31% of Aboriginal people lived in major cities, they made up less than 3% of the populations of these cities, with the exception of Darwin (10%).[4] The assumption has been made that better access to health care means that urban-dwelling Aboriginal Australians score better on indicators of health than Aboriginal Australians living in rural or remote areas.[3] A limited number of studies have contradicted this assumption.[5,6]

Winnunga Nimmityjah Aboriginal Health Service (WNAHS) is an Aboriginal community-controlled health service established in Canberra in 1988 and governed by an Aboriginal Board elected by the local Aboriginal community. WNAHS provides comprehensive primary health care to around 3500 patients per year, and does not refuse access to non-Aboriginal Australians in need. At the time we conducted this study, in 2006, Aboriginal and Torres Strait Islander people based in and around the Australian Capital Territory (including Queanbeyan in New South Wales) numbered around 4770.[7,8] WNAHS provides a bulk-billing general practice "drop in" type service with no appointment needed. In this study, we aimed to describe the reasons why patients attended WNAHS, and to compare these with the overall patterns of attendance in Australian general practice.

METHODS

We used a data collection instrument adapted from the New Zealand National Primary Medical Care Survey (NatMedCa)[9] and Bettering the Evaluation and Care of Health (BEACH) study[10] tools. Data on all consultations were collected by all eight doctors working at WNAHS over two 2-week periods — one in March and one in November to December 2006. The data collection instrument collected data on: patient demographic characteristics; the reason for the consultation according to the patient; up to four problems managed at the consultation; and investigation and management of each problem.

The reasons for encounters and problems managed were classified using the 17 chapters (or clinical domains) in the *International classification of primary care*, second edition[11] by two coders (one for each survey period) using letter codes only.

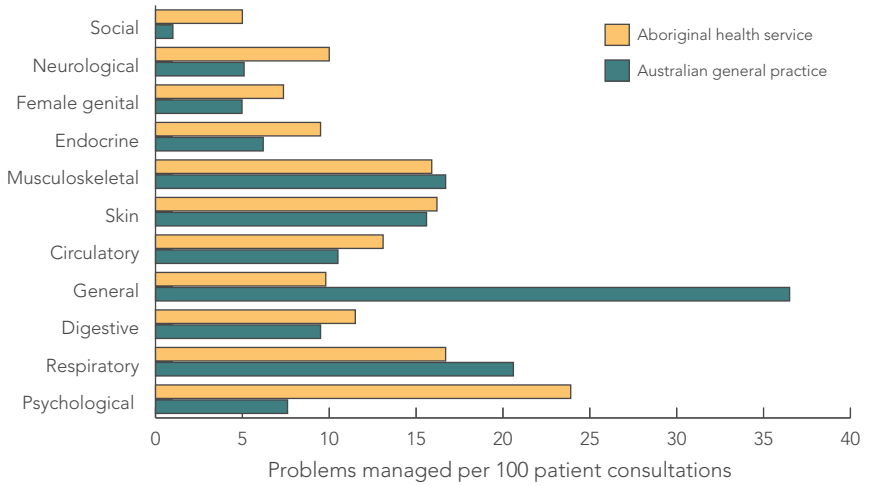
Comparisons with Australian data were achieved by determining the standardised attendance ratios for different problems managed. These were calculated by indirectly standardising our data against that for the population attending general practice from May 2004 to April 2005 reported in the BEACH study,[10] which we used as the reference population. The numerator on sex-specific attendances for each chapter for the reference population was derived from BEACH data[10] and the denominators were derived from that year's published report on the BEACH study.[12] Statistical comparisons between proportions were calculated using χ^2 analysis in SPSS-X (SPSS Inc, Chicago, Ill, USA).

Ethics approval for this study was given by the Australian National University Human Research Ethics Committee and the WNAHS Board.

RESULTS

Data were available for 324 encounters in the March sample and 286 encounters in the November to December sample, giving a total of 610 patient encounters (with a ratio of 1.5 female encounters to one male encounter). Eighty-three per cent of attendances were by Aboriginal patients; non-Aboriginal patients comprised 24% of patients attending in November to December, but only 6.2% of patients attending in March (χ^2, 40; $P < 0.001$). Patients at WNAHS in 2006 were significantly younger than the reference population, with 12% of patients being aged under 4 years (compared with 5.4% in the reference popula-

1 Unadjusted rates of problems managed in urban Aboriginal health service compared with Australian general practice



tion; $P < 0.0001$) and only 5% being aged over 65 years (compared with 27.6% in the BEACH population; $P < 0.0001$).

Problems managed

There were 912 problems managed during the 610 encounters (a rate of 1.5 problems per encounter). The pattern of attendances at WNAHS differed significantly from attendance patterns at Australian general practice overall (Box 1), in that most service contacts at WNAHS involved patients with complex and chronic illnesses — particularly psychological conditions, for which a third of attendances were for substance misuse. Age-adjusted standardised attendance ratios indicate that WNAHS patients had an attendance rate for psychological, endocrine and neurological conditions that was more than twice, and an attendance rate for social problems that was more than five times, that of the overall Australian population (Box 2).

The high rate of attendance for neurological conditions was attributable to a significant burden of illness associated with headache (two-thirds of neurological presentations were coded under this reason for encounter) and neuropathy associated with trauma or diabetes.

Referrals

A referral to another service or practitioner occurred in 19% of encounters (compared with 12% for the BEACH reference population), with 56% of these referrals being to specialists and 40% to allied health professionals (including dentists).

DISCUSSION

Our findings suggest that the patterns of health service attendance of urban Aboriginal people differ from those of the overall Australian population, particularly in relation to mental health, endocrine and neurological conditions. Inala Indigenous Health Service has also reported high rates of mental illness, substance misuse and cardiovascular risk factors.[13] The question of whether substance misuse and related psychological problems occur at rates similar to those in Aboriginal Australians living in rural or remote areas warrants further investigation.[14] WNAHS provides a visiting psychiatry service, a visiting psychotherapist, an opiate program and a large social health team. It is unclear what effect these services have on presentations to general practitioners.

Diabetes is a condition managed significantly more often in consultations with Aboriginal Australians than in the general population, reflecting the higher rates of diabetes among Aboriginal Australians.[15] This is similar to the findings of the Townsville Aboriginal and Islander Health Service (TAIHS), where diabetes was the most common problem managed (11.3% of consultations), but it must be noted that the TAIHS study also included primary care services by non-doctors.[6] The high rate of attendance for neurological disorders, particularly headaches, has not been described before.

The low standardised attendance ratio for reproductive health may be attributable to specific clinics run by WNAHS, which employs midwives to provide comprehen-

2 Rates of management of the 15 most common classifications and standardised attendance ratios (compared with attendance patterns to general practice for the reference population)

Problem managed*	Problems managed per 100 consultations†	Problems managed per 100 problems managed‡	Standardised attendance ratio (95% CI)§
Psychological	23.93	16.01	2.14 (2.01–2.28)
Respiratory	16.72	11.18	0.78 (0.73–0.83)
Digestive	11.47	7.68	1.17 (1.09–1.24)
General	9.84	6.58	0.29 (0.27–0.30)
Circulatory	13.11	8.77	1.79 (1.68–1.91)
Skin	16.23	10.85	0.95 (0.89–1.02)
Musculoskeletal	15.90	10.64	1.13 (1.05–1.20)
Endocrine	9.51	6.36	2.44 (2.29–2.60)
Female genital	7.38	4.93	1.10 (1.03–1.17)
Neurological	10.00	6.69	2.90 (2.71–3.09)
Ears	2.95	1.98	0.64 (0.60–0.68)
Social	5.09	3.40	5.19 (4.85–5.52)
Pregnancy and family planning	1.97	1.31	0.14 (0.13–0.15)
Eyes	1.64	1.10	0.69 (0.65–0.74)
Urological	2.95	1.97	1.41 (1.32–1.50)

* *International classification of primary care* classification group.[11] † 610 total consultations. ‡ 912 total problems managed. § Indirectly standardised using the population attending Australian general practice from May 2004 to April 2005 reported in the Bettering the Evaluation and Care of Health study[10] as the reference population. ◆

sive antenatal and postnatal care (attendances at which were not included in this survey of attendances to GPs). There were few attendances for renal disease, despite the higher rate of attendance for endocrine disorders, mainly diabetes.

Although ear disease is well described among Aboriginal populations, this population of young people had fewer presentations for ear disease than an age-matched Australian population, suggesting a need for greater case-finding among young Aboriginal people.

WNAHS data noted fewer presentations for "simple" consultations such as respiratory illnesses and skin problems than the general Australian population. Patients who attend this service present with complex comorbid conditions usually involving a combination of psychological and medical problems, which are likely to require extended consultation times. TAIHS has shown that its doctors manage more problems per consultation than Townsville general practices, and thus have significantly more long consultations. Our data did not capture use of the Indigenous health check items under Medicare, but Inala Indigenous Health Service has found these valuable for detecting risk factors for chronic disease and uncovering important new diagnoses. Future studies should consider consultation times and the use of health checks.

Aboriginal primary health care is a challenging form of general practice in both urban and rural settings, involving the management of largely complex health problems. Current funding arrangements do not recognise these complexities. There is a need for other urban Aboriginal health services in Australia to publish their health service attendance patterns with a view to influencing policymakers to consider increasing targeted program funding to Aboriginal health services. Such funding could feasibly address the needs identified by patterns of presentation for enhanced support services in Aboriginal health services.

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COMPETING INTERESTS

None identified.

AUTHOR DETAILS

Karen M Flegg, MB BS(Hons), FRACGP, MIPH, Senior Lecturer in General Practice and Community Health[1]
Christine B Phillips, MB BS, MPH, FRACGP, Associate Professor in Social Foundations of Medicine[1]
Anne L Collins, BA, BSc, Former Medical Student[1]
Peter G Sharp, MB BS, Medical Director[2]
Meetali Kanagasundaram, BSc(Hons), BBiomedSc, MB BS, Former Medical Student[1]
Ray W Lovett, BN, BHSc, MAppEpi, PHD Scholar[3]
Marjan Kljakovic, MB ChB, FRNZCGP, PhD, Professor of General Practice[1]

1 School of General Practice, Rural, and Indigenous Health, Australian National University Medical School, Canberra, ACT.
2 Winnunga Nimmityjah Aboriginal Health Service, Canberra, ACT.
3 National Centre for Epidemiology and Population Health, Australian National University, Canberra, ACT.

Correspondence: karen.flegg@anu.edu.au

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