Cardiovascular problems and risk behaviours among patients at general practice encounters in Australia 1998–00

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General Practice Statistics and Classification Unit 2000 [cited 22-12-2000]. SAND abstracts from the BEACH program. Sydney: AIHW/University of Sydney. Available from Internet: http:/www.fmrc.org.au/beach.htm.

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Cardiovascular problems and risk behaviours among patients at general practice encounters in Australia 1998–00

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Foreword

This BEACH (Bettering the Evaluation and Care of Health) report represents a very significant addition to our understanding of general practice activity in Australia. The data come from the first 2 years of the BEACH program (April 1998 to March 2000) and provide large amounts of information about patients who visit their general practitioners with cardiovascular issues and about those general practitioners.

This is not a duplication of the prevalence studies published regularly by bodies such as the National Heart Foundation. It is complementary to such documents, however, and as such will be very useful in planning primary healthcare in the future.

Based on some 203,100 encounters, the data tell us, for example, that patients classed as 'cardiovascular' were significantly older than those who were 'non-cardiovascular', which is not surprising, but also that for all age groups there were relatively more cardiovascular encounters for females than for males, which is somewhat surprising. There were no significant differences in terms of ethnicity or Aboriginal/Torres Strait Islander status for patients attending cardiovascular encounters, which is a little concerning given the known high prevalence of cardiovascular disorders in Aboriginal and Torres Strait Islander peoples. Almost 60% of the patients with cardiovascular encounters were aged over 65 and most were long-standing patients at the practice. Cardiovascular encounters resulted in significantly more prescriptions and pathology tests than the overall average.

The report also contains useful information about ongoing risk factors and risk behaviours in terms of cardiovascular disease in the Australian community which will be of interest and value to general practitioners and to health planners. I hope that it might also provide some impetus for GPs to increase their 'prescribing' of interventions such as weight reduction and exercise.

Given the importance of cardiovascular disorders in the overall burden of morbidity and mortality in Australian society, it is very pleasing as a cardiologist to see information such as this being collected and published. I commend this report not just to all categories of healthcare providers but to the Australian public in general. It is a privilege to have been invited to write this foreword.

Terry Campbell

President, Cardiac Society of Australia and New Zealand.

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Background

Despite advances in treatments and the introduction of prevention strategies over the past 30 years, cardiovascular disease remains the single largest cause of premature death and death overall in Australia. As cardiovascular disease most commonly affects older persons, the progressive ageing of Australia's population is likely to result in an increasing future demand relating to these conditions on the healthcare system. Currently there are little published data available about cardiovascular problems in the general practice population.

Aims

This study aims to describe the cardiovascular problems managed in general practice, the patients with cardiovascular problems, general practitioners (GPs) who frequently manage cardiovascular problems, and the relative frequency of specific cardiovascular problems managed in general practice. It further aims to investigate health risk behaviours of patients with cardiovascular problems and the prevalence of cardiovascular problems in the general practice patient population. Finally, it aims to describe and compare changes in the management of cardiovascular problems over the 1990s using data from the 1990–91 Australian Morbidity and Treatment Survey (AMTS) and the 1998–00 BEACH program.

Methods

This is a secondary analysis of data from the BEACH (Bettering the Evaluation and Care of Health) program, a continuous national study of general practice activity in which a random sample of approximately 1,000 recognised GPs per year records details of 100 doctor–patient encounters of all types. The information is recorded on structured paper encounter forms. GP–patient encounters from the first 2 years of the BEACH program, April 1998 to March 2000, provided a sample of 203,100 encounters recorded by 2,031 GPs. Also analysed were data collected for subsets of the encounters relating to the prevalence of cardiovascular problems and self-reported health risk behaviours in the patient population.

Results

At least one cardiovascular problem was recorded by GPs at 31,161 (15.3%) of the 203,100 encounters (cardiovascular encounters).

Characteristics of GPs at cardiovascular encounters

Being male, aged more than 35 years, working full time, having graduated in Australia, conducting more than half their consultations in a language other than English, and working in smaller or rural practices were significant predictors of high cardiovascular encounter rates.

Characteristics of cardiovascular encounters

The characteristics of the cardiovascular encounters were compared with those of the non-cardiovascular encounters. Cardiovascular encounters were more likely to be claimable through Medicare, less likely to be claimable through workers compensation, more likely to be long surgery consultations and more likely to be home visits.

Patients at cardiovascular encounters were more likely to be male, and were significantly older than those at non-cardiovascular encounters. They were less likely to be new patients to the practice and more likely to hold a Commonwealth Government Health Care card or a Veterans' Affairs card.

At cardiovascular encounters there were significantly more patient reasons for encounter and more problems managed. The problems were less likely to be new to the patient than those at non-cardiovascular encounters.

Cardiovascular problems managed

Over half of the cardiovascular problems managed were labelled as hypertension of various types. Ischaemic heart disease was relatively common as was cardiovascular check-up, other vascular disease, heart failure and arrhythmia. Problems less frequently presented related to cerebrovascular disease and other circulatory disease.

Management of cardiovascular problems

For 61.9% of cardivascular problems, at least one medication was prescribed or advised at the encounter. At least one non-pharmacological treatment occurred for 16.5% of cardiovascular problems, the majority being advice or counselling. Almost 6% of cardiovascular problems were referred, mainly to a specialist, and 12% generated at least one investigation, the majority of these being for pathology.

Changes since 1990–91

Between 1990–91 and 1998–00 there was a decrease in the rate of cardiovascular encounters with patients in all age groups from 25 to 74 years. The rate of management of ischaemic heart disease and heart failure decreased but there was an increase in cardiovascular check-up, pointing to a decrease in mangement by GPs of serious disease and an emphasis on preventive measures. This change was also evident in management of cardiovascular problems, with a relative increase in medications such as antihypertensives, hypolipidaemics and anticoagulants. Medications that were new to the market during the 1990s accounted for a large proportion of the overall increase and contributed to the decrease in GP prescribing of some medications that were available in 1990–91.

Prevalence of cardiovascular problems

The prevalence of cardiovascular problems in general practice patient encounters was estimated to be 24.5%, at least one such problem bring recorded at 3,000 of the 12,247 encounters in the subsample. This prevalence rate is higher than the rate per 100 encounters because the latter does not include problems which are not managed on the day of the patient's visit to the GP. Over two-thirds of these patients had at least one of their cardiovascular problems managed at the encounter. At these 3,000 encounters, 72.5% of patients reported having only one cardiovascular problem and 22.2% reported the presence of two cardiovascular problems. The prevalence of hypertension among general practice patients was estimated to be 15% (95% CI: 13.8–16.1) and this was followed by ischaemic heart disease (IHD)/acute miocardial infarction (AMI) (4.1%),

heart failure (1.9%), arrhythmias (1.8%) and 'other vascular disease' (1.7%). At encounters where a current cardiovascular problem was recorded the prevalence of lipid disorder was estimated to be 11.5% (95% CI: 9.7–13.3). The prevalence of diabetes at these cardiovascular encounters was estimated at 11.6% (95% CI: 10.2–13.1).

Health risk behaviours of patients at cardiovascular encounters.

Patients at a sample of cardiovascular encounters ('cardiovascular patients') also provided information about their current smoking status. Another sample of 11,476 cardiovascular patients responded to questions about their alcohol consumption and their height and weight. One in ten patients reported being current smokers (8.2% of adult females and 13.2% of adult males). At-risk alcohol intake was reported by one in five of the subsample (27.1% of adult males and 15.7% of adult females). The rate of at-risk drinking in younger adults was 40.0%. Almost two-thirds of the sampled cardiovascular patients were either overweight (37.5%) or obese (25.2%). Both of the alcohol and overweight/obese risk factors were reported by 13.2% of the sample. However, younger males aged 18–44 years were far more likely to be overweight/obese and drink at-risk levels of alcohol (> 25%) than women and older male cardiovascular patients.

Conclusion

This secondary analysis of BEACH data has described the cardiovascular problems being managed by GPs, and the relative frequency of their management in the general practice population. The Supplementary Analysis of Nominated Data (SAND) substudies have provided an indication of the likely prevalence of various types of cardiovascular problems being encountered in this population. They have also allowed investigation of the extent to which people with known cardiovascular problems continue to partake in risk behaviours such as smoking, excessive alcohol consumption or remaining overweight. These are the first data of this type from such a large national sample of general practice patient encounters. Added to data from other sources, these and further measures currently being gathered in BEACH subsamples can be used in the future to assess Australia's progress in reducing cardiovascular problems and risk behaviours.

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Ethics approval for this study was obtained from the Human Ethics Committee of the University of Sydney and the Ethics Committee of the Australian Institute of Health and Welfare.