SAND abstract No. 111 from the BEACH program 2007–08

Subject: Adverse drug events in general practice patients

Organisation supporting this study: Australian GP Statistics and Classification Centre

Issues: The proportion of general practice patients who have experienced an adverse event resulting from the use of a medication during the preceding six months. The number, cause and severity of these adverse events, GP confidence in causation and number of resulting hospitalisations.


Summary of results

The age-sex distribution of respondents was similar to the distribution for all BEACH encounters, with the majority (60.1%) of patients being female.

Of the 8,602 respondents, 801 (9.3%; CI: 8.4–10.3) had experienced an adverse drug event in the previous six months. Among male patients, 7.5% (95% CI: 6.4–8.6) reported having an adverse drug event, significantly lower than the 10.5% (95% CI: 9.4–11.7) of female patients. The proportion of patients who reported an adverse drug event increased with age group of patient from 3.3% of infants <1 year to 13.1% of patients aged 75 years or more.

Selective serotonin reuptake inhibitors (SSRIs) were the medication group most frequently reported as the cause of adverse events, but only accounted for 6.1% of the medications, due to the wide variety of medications named. HMG CoA reductase inhibitors (statins) were the second most commonly reported, accounting for 5.0% of the total adverse event medications. Of the 822 medications, the most common individual medications causing adverse events were amoxicillin, which accounted for 3.9%, paracetamol/codeine (3.2%), perindopril (3.0%) and atorvastatin (2.9%).

Of 783 adverse drug events, GPs indicated that in 75% the cause was a recognised side-effect. Drug sensitivity was the reported cause in 9.5%, and allergy in 8.4%. Just 0.8% indicated drug interaction as the cause, and contraindication was recorded in only one case (0.1%).

For 48.1% of patients, the adverse drug events were classed as mild, for 41.3% they were moderate, and for 10.5% they were classed as severe.

Of 764 patients with an adverse drug event for whom this information was known, 35 (4.6%) were hospitalised due to the event. Of 369 patients with a mild event, two (0.5%) were hospitalised, of 317 patients with a moderate event, 9 (2.8%) were hospitalised, and of the 77 patients with a severe event, 24 (31.2%) were hospitalised.

Information regarding GP confidence in causality was available for 781 of the 801 patients with an adverse event. On a scale of 1 to 6 (1=not confident to 6=completely confident) the median level of confidence was 5. For almost 40% of events, the level was ‘completely confident’.

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INSTRUCTIONS

These questions are about measuring the level of impact of medication events in the community. You will need to ask the patient for information when answering the following questions as you may not know if an adverse event occurred e.g. if the patient did not inform you of side effects they experienced or if the medication in question was prescribed / advised / supplied by another doctor / health professional in any setting (e.g. hospital inpatient, outpatient, primary care etc).

If you are interested in our previous work on this topic, please see Miller GC, Britt HC, Valenti L. Adverse drug events in general practice patients in Australia. Med J Aust 2006 Apr; 184(7):321-4.

ASK THE PATIENT

Please ask the patient if they have experienced an adverse event from the use of any medication in the past six months.

An adverse event is an unintended event which could have harmed or did harm the patient. ‘Harm’ includes physical, psychological or emotional suffering.

If no adverse events were experienced, end the questions here.

Medication involved in the event

Please list the drug (or drugs in the case of interactions) that you suspect were the cause of the most recent adverse event.

The drug(s) may be listed using the generic or brand name.

Severity of the event

Please indicate the severity of the event in terms of harm to the patient (in your clinical opinion).

Mild - a reaction of limited duration not requiring further treatment; minimum impact on daily activities.

Moderate - a reaction of longer duration or which requires further treatment; limits daily activities.

Severe - a reaction of any duration which results in hospitalisation and/or long term limitation of daily activities.

Cause of event

From the patient’s description or your knowledge of the most recent adverse event, what do you think was the most likely cause?

Please tick as many options as apply.

Hospitalisation

As a result of this adverse event, was the patient hospitalised?

Confidence of causality

Please indicate how confident you are that the drug(s) listed caused the adverse event.

Please circle a number on the scale to indicate your level of confidence that the drug(s) you nominated caused the event, where 1 = not confident, and 6 = completely confident.

* (Scale adapted from Weingart SN et al. Arc Intern Med. 2005;