

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.

Sample: 8,602 encounters from 294 GPs; data collection period: 16/01/2007 – 19/02/2007; 17/07/2007 – 20/08/2007; 25/09/2007 – 29/10/2007.

Method: Detailed in the paper entitled 'SAND Method 2007–08 on this website: <www.fmrc.org.au/publications/SAND_abstracts.htm>.

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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