

SAND abstract No. 3 from the BEACH program 1999–2000

Subject: Asthma

Organisations supporting this study: AstraZeneca and Aventis Pharma

Issues: The prevalence of asthma in the general practice patient population; its severity; current medications for asthma; their effectiveness and any adverse effects of medications.

Sample: 4,285 encounters for 213 GPs; data collection period: 30/3/99 – 7/6/99

Method: Detailed in the paper entitled 'SAND Method' on this web site (<http://www.fmrc.org.au/beach.htm>).

Summary of results

The age–sex distribution of the respondents was similar to the distribution for BEACH overall, with the majority (55.8%) of patients being female.

The prevalence of asthma among the 4,285 respondents was 14.7% (95% CI: 13.3–16.1). The highest prevalence was found among patients aged 5 to 14 years (26%, 95% CI: 14.2–37.8). Among children (aged <18) with asthma, 68.5% had infrequent asthma, 21.0% had frequent and 4.9% had persistent asthma. Among adults, 32.9% had very mild asthma, 27.3% had mild asthma, 27.7% had moderate and 7.9% had severe asthma. There was no gender difference in the distribution of asthma severity for children or adults.

Ninety percent (90.3%, 95% CI: 87.7–93.0) of patients with asthma used some form of medication to manage their asthma. Eighty three percent of these patients used reliever medications, 49% used preventer medications and 7% used controller medications. Use of relievers alone was the most common treatment regimen and salbutamol inhaler was the most common single medication used. Twenty one percent of patients taking medication used a spacer device, 30% using a small device and 68% using a large device.

Treatment regimens differed by the severity of asthma among children and adults. Relievers alone was the most common regimen for children with infrequent asthma and adults with very mild asthma. Relievers and preventers were most common among children with frequent or persistent asthma and adults with mild or moderate asthma. Ipratropium plus other medications was most common among adults with severe asthma. Salbutamol inhalers were the most common single medication used by patients in all severity categories, except children with persistent asthma who were more frequently prescribed salbutamol nebulas.

Among patients taking medication, the effectiveness of the current regimen was rated 5 (effective) on a scale of one to five for 46.4% (95% CI: 40.8–51.9). Patients taking relievers only medications were most likely (60.4%) to have a rating of 5 for effectiveness of the medication. Multivariate logistic modelling showed that severity of asthma was associated with effectiveness of treatment but the treatment regimen was not. Seventy one percent of patients taking medication reported no adverse effects of the current regimen. Adverse effects were most likely for patients taking ipratropium alone (45%). The most common adverse effect reported was tremor/shakes followed by palpitations. Multivariate logistic modelling showed that severity of asthma was associated with adverse effects of treatment but that medication regimen was not.

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