Health Survey for England 2013: the use of prescribed medicines

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In 2013, for the first time, the annual Health Survey for England sought information on medicines use within the community. Here we examine the results.

<table>
<thead>
<tr>
<th>Category</th>
<th>Medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>Positive inotropic drugs, diuretics, anti-arrhythmic drugs, beta-blockers, medicines affecting the renin-angiotensin system, nitrates, calcium blockers, other antihypertensive medicines</td>
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<tr>
<td>Antihypertensives</td>
<td>Diuretics, beta-blockers, ACE inhibitors, angiotensin-II receptor blockers, renin inhibitors, calcium blockers, other antihypertensive medicines; but only if being taken for hypertension</td>
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<tr>
<td>Lipid-lowering</td>
<td>Statins, other lipid-lowering drugs</td>
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<tr>
<td>Antiplatelet</td>
<td>Low-dose aspirin, clopidogrel, dipyridamole, prasugrel, ticagrelor, glycoprotein IIb/IIIa inhibitors</td>
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<tr>
<td>Gastrointestinal</td>
<td>Proton pump inhibitors</td>
</tr>
<tr>
<td>Analgesics and NSAIDs</td>
<td>Non-opioid analgesics, opioid analgesics, medicines for neuropathic pain, antimigraine drugs, NSAIDs (including topical formulations)</td>
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<tr>
<td>Antidepressants</td>
<td>Tricyclics and related therapy, MAOIs, SSRIs, others</td>
</tr>
<tr>
<td>Asthma and COPD</td>
<td>Bronchodilators, inhaled steroids, cromoglicate and related therapy, leukotriene-receptor antagonists, phosphodiesterase type-4 inhibitors, oxygen</td>
</tr>
<tr>
<td>Antidiabetic</td>
<td>Insulin and other antidiabetic medicines</td>
</tr>
<tr>
<td>Infection</td>
<td>Antibacterials</td>
</tr>
</tbody>
</table>

Table 1. Categories of medicines included in HSE 2013

The nation awoke on 10 December 2014 to the news that around half of adults in England were taking at least one prescribed medicine. It seemed that many people had not expected the prevalence of drug treatment to be so high but the figure, published by the Health Survey for England 2013 (HSE), is an underestimate of the true level of medicines use. It will not be a surprise to prescribers, who have seen prescriptions in primary care rise almost year-on-year to a level that now exceeds 1 billion annually.2

What is HSE?
HSE is an annual survey carried out to provide information about public health to support government planning. The 2013 survey is the 23rd and included 8795 adults aged 16 and over and 2185 children living in private accommodation in England. This was the first occasion on which information about medicines use was sought.

The new data come from interviews of 6183 adults conducted by a nurse. Participants were asked ‘Are you taking or using any medicines, pills, syrups, ointments, puffers or injections prescribed for you by a doctor or nurse?’ They were also asked the name of each medicine and usually, the nurse was shown the pack. Where more than one indication was possible, the nurse asked why the medicine had been prescribed. Up to 22 medicines could be recorded and, for each, the nurse asked whether the interviewee had taken or used that medicine in the last week.

About 1 per cent of respondents reported self-treatment with an over-the-counter (OTC) statin; most were also taking a prescribed statin. Other OTC medicines or complementary medicines were excluded and, because the sample population was drawn from the community, people in hospital at the time were not questioned.

Which medicines?
The survey covered all categories of medicines but excluded other prescribable forms of treatment, such as dressings and appliances. The 10 most frequent categories are listed in Table 1, which account for about 60 per cent of all prescriptions dispensed in primary care in England in 2013.3
Use of medicines
Forty-three per cent of men and 50 per cent of women said they had taken at least one prescribed medicine during the previous week; 22 and 24 per cent respectively said they had taken at least three. As might be expected, medicines use increased as household income fell and deprivation increased, and this was associated with a trend to greater medicines use from the south to the north of the country. The proportion of people in the most deprived quintile taking at least three medicines was almost double that in the least deprived quintile (29 and 33 per cent of men and women vs 18 and 19 per cent).

As might be expected from these figures, increasing levels of overweight were associated with higher prevalence of medicines use; 30–40 per cent of people with BMI \( \geq 35 \text{kg/m}^2 \) reported taking at least three medicines.

The proportion of men and women taking a medicine increased with age (see Figure 1). There was a marked increase in polypharmacy with age, with more than half of respondents aged 65 or older taking at least three, and one-third taking at least six medicines after age 75.

Impact of illness
The majority of medicines use was due to treatment of people with longstanding illness. Twenty-two per cent of men and 25 per cent of women reported a longstanding illness that limited their ability to carry out day-to-day activities and 16 and 15 per cent respectively reported a non-limiting longstanding illness.

Among men, about 70 per cent with a longstanding illness were taking medicines but the proportion taking at least three medicines was higher in those with limiting illness (40 vs 30 per cent). The difference was greater among women, with 45 per cent of those with limiting illness taking at least three medicines compared with 28 per cent with non-limiting illness.

Almost all people who needed help with activities of daily living were taking a medicine, with the proportion taking at least six being increased by two- to three-fold compared with respondents who did not need help.

Medicine categories
More men than women were taking a lipid-lowering agent but women were more frequent users of analgesics/

![Figure 1. Number of prescribed medicines taken in the last week, by age and sex](prescriber.co.uk)

![Figure 2. Prevalence of taking at least one prescribed medicine within specific medicine classes in the last week, by sex](prescriber.co.uk)
NSAIDs, antidepressants and drugs for asthma or COPD (see Figure 2). In general, use of all categories of medicine increased with age up to 75–84 years but this trend was least noticeable with antidiabetic drugs and drugs for asthma or COPD treatment. Antidepressant use was more common in 45- to 64-year-olds than other age groups, particularly among women. There were broadly similar trends moving from the highest to lowest income quintile, with differences most marked for lipid-lowering drugs, antihypertensives, proton pump inhibitors (PPIs) and analgesics/NSAIDs.

Increasing BMI was, not surprisingly, associated with increasing use of lipid-lowering agents and antihypertensives but also with antidepressants and analgesics. Longstanding illness was associated with higher use of cardiovascular medicines and drugs for asthma or COPD regardless of limitation whereas use of PPIs, analgesics or antidepressants was more frequently reported by people with limiting illness.

**Other medicines use**
Medicines use in the UK is much more prevalent than HSE 2013 suggests. The survey excluded smoking cessation products (520,000 people used such a product in 2013/14) and contraception (in 2008/09, 25 per cent of women under 50 said they used a combined oral contraceptive). Self-treatment is also common. In 2009, the Proprietary Association of Great Britain reported that 21 per cent of consumers treated themselves with an OTC product without seeking medical advice and the proportion of parents who said they treat their children’s minor ailments without consulting a doctor ranges from 30 per cent (bruises) to 88 per cent (headache). The one-year prevalence of
using a complementary medicine is approximately 20 per cent. 8

**Conclusion**

Around half of adults living in the community in England are taking a prescribed medicine, with proportionately higher levels of use and more frequent polypharmacy among older people and individuals with longstanding illness. Greater deprivation and lower household income are associated with higher levels of medicines use. This snapshot represents a fraction of medicines-taking behaviour in the UK, with large sectors of the population reporting self-treatment with conventional and complementary OTC medicines.

**References**


**Declaration of interests**

None to declare.

Steve Chaplin is a pharmacist who specialises in writing on therapeutics