Lung & Asthma Information Agency

Trends in general practitioner prescribing of drugs for respiratory disease

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Over the last decade, the annual number of prescriptions dispensed in England (see footnote) has risen from 300 million in 1981 to 371 million in 1991, representing an increase in the average number of prescriptions per person per year from 6.7 to 7.7. Much of the increase occurred in the elderly (figure 1) and some of this increase will be attributable to the increasing proportion of very elderly in this age group.

Prescriptions for drugs specific to the respiratory system (British National Formulary, chapter 3) also show an upward trend over this period but it is not possible to determine from routine data whether the increase is concentrated in any specific age group. The prescribing of antibiotics and other anti-infective drugs (BNF chapter 4) has also increased but it is not possible to identify those antibiotics prescribed for respiratory disorders.

Patterns of prescribing

In 1991 there were 41 million prescriptions for drugs specific to the respiratory system (BNF chapter 3). Such drugs currently account for 10% of prescriptions (figure 2), making them the fourth most commonly prescribed drugs after preparations acting on the central nervous system (18%), preparations acting on the cardiovascular system (17%) and drugs used in the treatment of infections (12%).

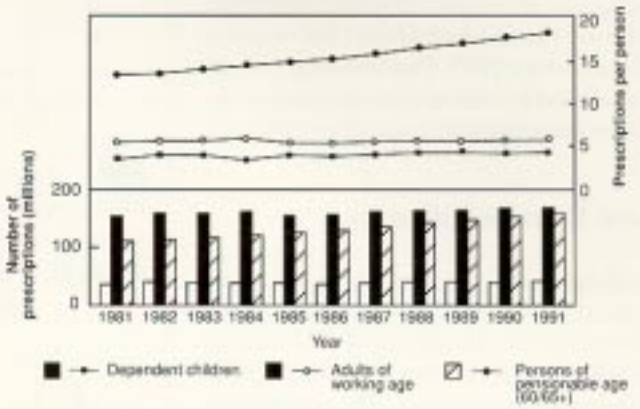
Treatments for asthma and COAD

Total prescriptions for asthma drugs have almost doubled over the past decade, with prescriptions for bronchodilators and prophylactic therapies (inhaled steroids, cromoglycate, etc) increasing at similar rates.

Prescriptions for inhaled corticosteroids quadrupled during the 1980s (figure 3), while prescriptions for "cromoglycate and related therapies" (cromoglycate, nedocromil and ketotifen) have declined in recent years. The increase in prescriptions for bronchodilators during the 1980s (figure 4) was largely attributable to the increase in prescriptions for selective beta$_2$-adrenoceptor stimulants (salbutamol, terbutaline, fenoterol, etc).

Prescriptions for theophylline preparations increased during the early 1980s but the trend is now downwards. The prescribing of antimuscarinic bronchodilators, while less common (less than 5% of bronchodilator prescriptions), has increased most rapidly over the last decade, and these have recently overtaken

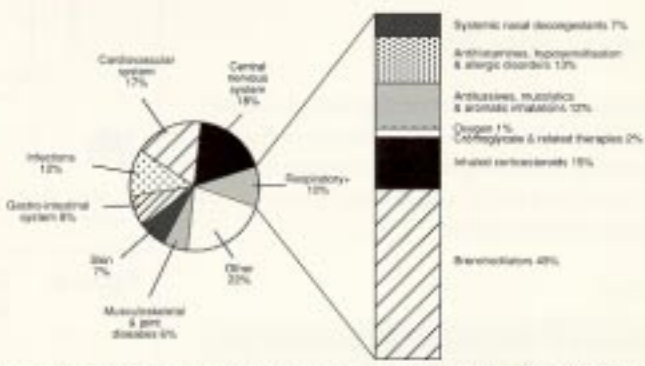
Figure 1: Trends in prescriptions by exemption category, all therapeutic groups, England 1980-91



Prescriptions dispensed by community pharmacists and appliance contractors only

Source: Prescription Pricing Authority

Figure 2: Prescriptions by British National Formulary (BNF) chapter, England 1991



+ BNF chapter 3. Some, but not all, nasal remedies are included in chapter 3; antibiotics and other anti-infectives are included under "infections"

Source: Prescription Pricing Authority

Figure 3: Trends in pescribing of prophylactic asthma drugs, England 1980-91

Source: Prescription Pricing Authority

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other adrenoceptor stimulants (ephedrine, isoprenaline, etc) as the third most commonly prescribed group of bronchodilators. The use of compound bronchodilator preparations - which are not generally recommended - has declined slightly, but some 600,000 such prescriptions are still dispensed each year.

One quarter of a million peak flow meters were prescribed in 1991, the first year in which they could be prescribed.

The prescription of oxygen cylinders more than doubled during the first half of the 1980s but has remained stable since 1985. This levelling-off may be partly attributable to the growth in the prescribing of oxygen concentrators since the mid 1980s (figure 5).

Treatment for nasal allergies

The prescribing of oral antihistamine preparations - used for nasal and other allergies - has remained stable over the last decade (figure 6). Within this category, the proportion of non-sedative preparations has increased from zero in 1980 to 60% of all antihistamines prescribed in 1991. Prescriptions for nasal sprays or drops containing topical corticosteroids and sodium cromoglycate have increased three-fold over the last decade, while the prescription of nasal decongestants - both topical and systemic - has declined (figure 6).

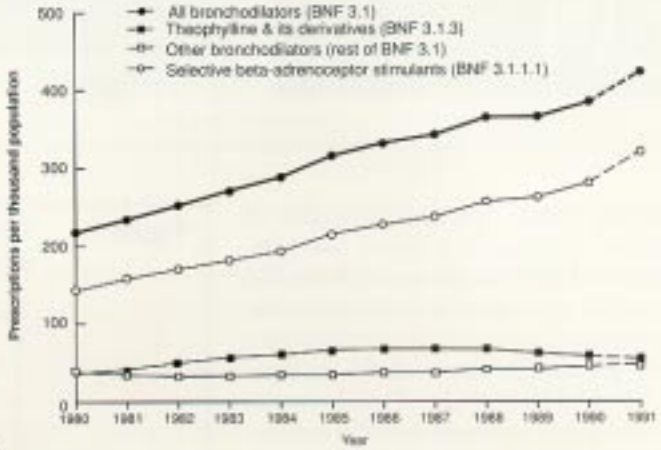
Other respiratory drugs

The introduction of the limited list was associated with a gradual decline in the prescription of antitussives, a large drop in prescriptions for aromatic inhalations and the near disappearance of prescriptions for mucolytics.

Summary

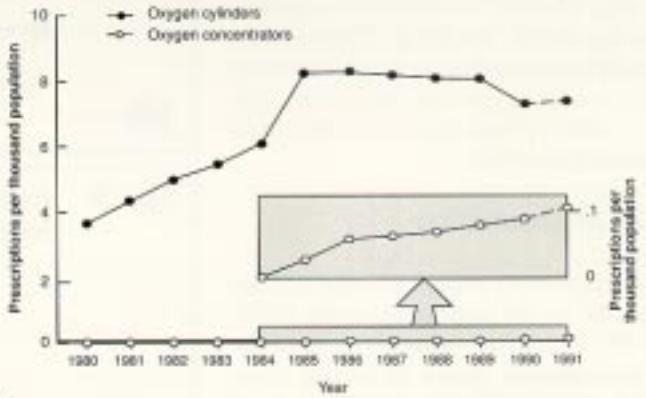
- The total number of prescriptions issued per person over the past decade has been stable in children and adults of working age, but has increased in those of pensionable age.
- There is an upward trend in the number of respiratory prescriptions per person, but the ageing population may account for this.
- Annual prescribing of asthma preparations has almost doubled over the last decade; the prescribing of inhaled corticosteroids has increased at the greatest rate.
- Prescribing of bronchodilators increased by 80% between 1980 and 1990; an increase in selective beta-agonists accounted for most of this increase
- Prescriptions for domiciliary oxygen have increased; prescribing of oxygen cylinders is now stable; the number of oxygen concentrators prescribed is currently increasing by more than 10% per year.
- The prescription of non-sedative antihistamines and prophylactic drugs for the treatment of nasal allergies has increased.

Figure 4: Trends in prescribing of bronchodilators, England 1980-91



Source: Prescription Pricing Authority

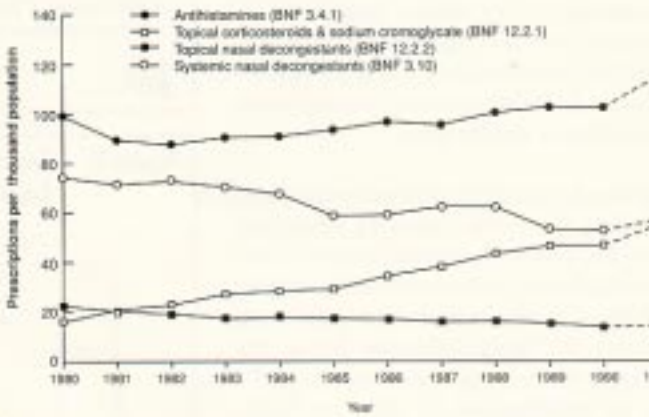
Figure 5: Trends in prescribing of oxygen cylinders and oxygen concentrators, England 1980-91



Source: Prescription Pricing Authority

Note: Oxygen concentrator data relate to financial years 1980/81 - 1991/92

Figure 6: Trends in prescribing of treatments for nasal allergies, England 1980-91



Source: Prescription Pricing Authority

Footnote

Data for 1980-90 are derived from a 1 in 200 sample of prescriptions dispensed by community pharmacists and appliance contractors (100% data for oxygen concentrators). Data for 1991 only also include prescriptions dispensed by dispensing doctors (9% of prescriptions dispensed) and are based on 100% sample. Data for 1980-90 are based on fees, 1991 data are based on items. All figures exclude drugs dispensed by hospital pharmacies.