What use is generic prescribing?

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SUMMARY. The dispensing of generic preparations at four dispensing chemist shops was investigated by means of a questionnaire. Certain generic prescriptions result in the dispensing of proprietary products despite the existence of generic preparations, and the pharmacist may be reimbursed for the cost of the proprietary drug which has been dispensed. Not all generic prescriptions result in the dispensing of cheaper drugs because of the methods of payment to chemists. If doctors write more generic prescriptions there will ultimately be more dispensing of generic products. Even in the case of drugs still under patent, prescribing by generic name should be encouraged. The savings achieved by generic prescribing are to some extent at the cost of the dispensing chemists. The method and scale of payments for dispensing requires urgent review.

Introduction

THE Department of Health and Social Security (DHSS) lists class 1 generic prescriptions as those for which an unbranded generic exists, and class 2 generic prescriptions as those for drugs, such as cimetidine, where the proprietary preparation is still under patent. Savings in costs are thus only possible from class 1 generic prescriptions. A recent study[1] concerning generic prescribing highlights the savings which are possible without changing the treatment. Of 2625 prescriptions written by two doctors 31 per cent were for proprietary drugs with exact generic equivalents. Only 72 per cent of these generic equivalents were available locally. The possible saving was £883.00 per month, an 8.8 per cent saving on the drug bill, with no change in the actual drugs used. The saving is impressive, but why could only 72 per cent of these prescriptions be dispensed as generic products by local chemists? The answer requires knowledge of the way in which pharmacists are paid.

If a drug is prescribed by its proprietary name the pharmacist is obliged to dispense that drug. He receives the cost of the drug plus an 'on-cost', of about 25 per cent, and a dispensing fee as payment.[2] If a pharmacist receives a prescription for a generic preparation he may dispense any preparation, proprietary or otherwise, of that drug. If he dispenses a proprietary preparation he endorses the prescription form to that effect. The amount which he gets paid depends on the circumstances. If the generic drug appears on an agreed list, or if the pharmacist regularly receives generic prescriptions for that drug, he receives a payment based on the cost of the generic preparation or of the cheapest proprietary preparation. If, however, the drug is not on the list and is rarely prescribed in generic form the pharmacist will be paid the cost of the preparation actually dispensed. As an 'on-cost' is added, it pays the pharmacist to stock the more expensive proprietary preparation, especially as he may also receive prescriptions for the drug by its proprietary name. By restricting the number of generic drugs the chemist also saves valuable storage space and may reduce the total size and cost of stock. This system of reimbursement explains why only 72 per cent of the generic drugs mentioned above were available for dispensing.

The fact that a class 1 generic prescription need not result in a generic product being dispensed prompted an investigation of dispensing of generic preparations in our district.

Method

At the time of this survey there were five dispensing chemist shops in King's Lynn, two of these being under the same ownership. One of the local chemist shops is a branch of the Boots chain, the others being privately owned. Pharmacists at all four concerns were approached with a view to ascertaining their dispensing practices. A number of commonly used drugs were selected on the basis of usefulness and of wide price divergence between the generic and proprietary product. Table 1 shows the drugs selected and also the relative costs of the generic and proprietary preparations. A questionnaire was produced: for each of the drugs in Table 1 the pharmacists were asked if they dispense generic or proprietary preparations. In addition, the pharmacists were asked to state whether, for a prescription for doxycycline, they dispense Vibramycin (Pfizer) or another cheaper proprietary brand, there being no generic preparation available at that time.

Table 1. Comparison of generic and proprietary prices of selected drugs.

Drug (generic/proprietary)	Amount	Cost[a] (£)
Bendrofluazide tablets 5 mg	100	0.24
'Centyl' (Burgess) 5 mg		2.65
Frusemide tablets 40 mg	100	0.56
'Lasix' (Hoechst) 40 mg		4.91
Spironolactone tablets 100 mg	100	25.08
'Aldactone' (Searle) 100 mg		35.92
Diazepam tablets/capsules 5 mg	100	0.20
'Valium' (Roche) 5 mg		1.65
Paracetamol elixir, paediatric	500 ml	1.76
'Calpol' (Calmic)		3.35
Phenytoin 100 mg (tablets)	100	0.57
'Epanutin' (Parke-Davis) 100 mg (capsules)[b]		1.85
Ampicillin capsules 250 mg	100	2.56
'Penbritin' (Beecham) 250 mg		7.93
Erythromycin tablets 250 mg	100	4.06
'Erythrocin' (Abbott) 250 mg		8.93
Ibuprofen tablets 400 mg	100	2.80
'Brufen 400' (Boots)		5.37
Allopurinol tablets 300 mg	100	26.27[c]
'Zyloric' (Calmic) 300 mg		39.28
Chloramphenicol eye-drops BP 0.5%	10 ml	0.43
'Chlormycetin' (Parke-Davis) eye-drops		1.12
Benzyl benzoate application	200 ml	0.53
'Ascabiol' (May and Baker)		1.52
Sodium chloride and glucose oral powder, compound, small size, 8.8 g	20	0.50[d]
'Dioralyte' (Armour)		3.90

[a] Prices from *Chemist and druggist price list*[4] and from *Chemist and druggist generics*.[5]

[b] Generic phenytoin tablets, but 'Epanutin' capsules.

[c] Generic allopurinol cost given is that of allopurinol (Evans).

[d] Cost shown is that given in *British National Formulary*, 1984.[3]

Results

The answers received are tabulated in Table 2. At first sight a large number of proprietary products appear to be dispensed for generic prescriptions, but many of these are reimbursed at the agreed rate for generic preparations. With 1100 branches handling over one million prescriptions per week, the Boots company is so large and buys in such bulk that it can afford to stock proprietary preparations at very little cost to itself over the generic price: there is a considerable saving in space, and thereby money, by not stocking so many generic preparations.

Table 2. Number of chemists who dispense a proprietary product from a generic prescription for selected drugs.

Prescription	Number of chemists who dispense the proprietary product (total $n=4$)
Bendrofluazide tablets 5 mg	1[a]
Frusemide tablets 40 mg	0
Spironolactone tablets 100 mg	1[a]
Diazepam tablets/capsules 5 mg	0
Paracetamol elixir, paediatric	0
Phenytoin 100 mg	0[b]
Ampicillin capsules 250 mg	1[a]
Erythromycin tablets 250 mg	1[a]
Ibuprofen tablets 400 mg	2
Allopurinol tablets 300 mg	1
Chloramphenicol eye-drops BP 0.5%	0
Benzyl benzoate application	0
Sodium chloride and glucose oral powder, compound, small size, 8.8 g	3

[a] Boots would only expect to be reimbursed for cost of generic form but dispense proprietary form because of savings made by bulk purchase. [b] One pharmacist would ask the patient whether tablets or capsules were required: if capsules were requested he would dispense Epanutin and endorse form accordingly.

In the case of Brufen 400 (ibuprofen, Boots) and Zyloric (allopurinol, Calmic) certain pharmacists endorse the prescription with the name of the proprietary drug dispensed in the expectation of receiving payment for that product rather than for the generic. In both cases the pharmacists concerned stated that, if sufficient generic prescriptions were received, they would receive notification that the generic price and not the proprietary price would be paid for future dispensing of that drug.

All the pharmacists were agreed that the weighing out of powders is time consuming and inadequately rewarded: three out of the four would dispense Dioralyte (Armour) for a prescription for sodium chloride and glucose oral powder, compound, small size. A extra fee is payable for mixing these powders: this amouts to £1.00 and is paid in addition to the standard dispensing fee of £0.40, thereby lessening the gap between the costs of the generic and proprietary products. It is, in any case, hard to imagine that many doctors would take the trouble to write out such a long generic prescription instead of the one-word proprietary product.

In the case of drugs for which no generic preparation is available, the pharmacist may dispense any proprietary form and will be reimbursed the cost of the drug dispensed. For doxycycline all four pharmacists dispense Vibramycin (Pfizer), the most widely prescribed by name and also the most expensive proprietary form.

After being asked the questions on the questionnaire, the pharmacists were asked for their comments on generic prescribing. The chief comment concerned loss of revenue: if generic prescribing increases, not only will chemists receive less 'on-cost' payment, but it will be necessary to hold stocks of both generic and proprietary forms; the cost of holding this increased stock and the cost of finding the extra storage space required will have to be met out of the chemists' own pockets. The pharmacists considered it unreasonable that attempts by doctors to cut costs should result in a loss of revenue to the chemists. They favoured a revision of the scale of payments to take account of this, and advocated a system whereby the financial gain to the chemist is the same regardless of whether a proprietary or generic version of a drug is dispensed. It was pointed out that there is no incentive for a dispensing doctor to make prescribing economies as these result in the same loss to him as they would to a dispensing chemist. Other points raised included that of bioequivalence of generic preparations, established for digoxin but for few other drugs, chemical equivalence usually being assumed to be adequate. Concern was expressed that some firms supplying generic preparations were small companies of uncertain status, leading to further work for the pharmacists who have to order more drugs from a greater number of suppliers. Finally, there is the problem of patients complaining that they have not received the same tablets as before, different generic suppliers producing the same product in slightly differing forms. This may lead to confusion and dissatisfaction for patients.

Discussion

The principal message to come out of this survey is that if enough generic prescriptions for a given drug are received by a chemist he will ultimately be reimbursed the cost of the generic product, regardless of the product actually dispensed. Where only one or two doctors in an area prescribe certain products generically the chemist may legitimately claim the cost of proprietary drugs dispensed despite the prescriptions being written generically. It is thus not enough for individual doctors to switch to generic prescribing of some products: a concerted effort by several doctors in one area will result in a greater saving than that of a similar number of doctors who are geographically separated.

Harris and colleagues[6] estimated that 38 doctors had projected savings of £11 500 in the final month of their trial concerning the effects of audit on prescribing: much of this saving was attributable to generic prescribing. They estimated that prescribing the 'big six' drugs — Mogadon, Valium, Indocid, Aldomet, Lasix and Inderal — by proprietary name was responsible for an extra £1000 per annum on the average general practitioner's drug bill. They stated that 'many drugs that can be prescribed generically are not used frequently and many that are used frequently cannot be prescribed generically. Generic prescribing concerns comparatively few drugs.' This is not strictly true: all drugs can be prescribed generically, but only a limited number of generic prescriptions result in savings due to the dispensing of generic preparations.

Savings are made by writing class 1 generic prescriptions, but drugs which currently fall into the class 2 generic prescription group will one day switch to the class 1 group. Generic prescription of class 2 drugs should be advocated because there is no publicity given to the ending of a patent and for the introduction of generic equivalents: patents on drugs have been increased from 16 to 20 years, the first eight or so of these being spent getting the drug onto the market.[7] The 12 years of use under patent are not the only years in which the drug makes profits: having been available for many years already it is the market leader and is not immediately replaced with cheaper prepara-

tions. Doctors are repeatedly reminded to prescribe out-of-patent drugs 'by name'. If drugs were prescribed by generic name during the years of patented use, doctors would automatically be prescribing cheaper alternatives as they become available, that is, when the class 2 generic prescriptions become class 1 generic prescriptions. During the time of the patent the drug companies would not lose out on the profit which they require in order to recoup the research and development costs: only later would the generic prescription of these products result in lower sales figures. It was the enforced application of this principle which was envisaged when the Sainsbury report in 1967 advocated the banning of proprietary names for new drugs.

The writing of generic prescriptions may save National Health Service money, but at whose expense? A large proportion of the savings will be at the expense of the drug companies, but a proportion is at the expense of the dispensing chemist. Some form of redress would appear to be required. Furthermore, if a more equitable system of reimbursement were implemented, doctors in dispensing practices would have more incentive to cut their prescribing costs.

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Respiratory viral infections.

Ciliary function and mucociliary clearance are primary mechanisms of defence in the respiratory tract. The authors found that infections by several common respiratory viruses in children were associated with ciliary abnormalities that could be detected on ultrastructural examination of the nasal epithelium. Dysmorphic ciliary forms involving microtubular aberrations were observed most often in the early stages of illness in focal sites of the nasal mucosa. Normal epithelial organization and ciliary ultrastructure appeared to be re-established during the convalescent period, from two to 10 weeks after infection. These observations suggest that interference with ciliogenic mechanisms leading to transient, compromised mucociliary clearance may represent a fundamental pathophysiologic disturbance in some respiratory viral infections.

Source: Varson JL. Collier AM, Hu SS. Acquired ciliary defects in nasal epithelium of children with acute viral upper respiratory infections. *N Engl J Med* 1985; **312:** 463-468.