

General Practice Observed

Undispensed prescriptions in a mining general practice

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Summary

Seven per cent of prescription forms issued in a mining practice were not presented at chemists for dispensing. The people least likely to present their prescription forms were men aged 25-34 years, particularly miners. To get sickness benefit these men have to consult a doctor, but the medical content of the consultation in these circumstances is often perceived by them as irrelevant and the medication rejected. Children and old people nearly always presented their prescriptions.

The percentage of undispensed prescription forms for the trainee doctor was higher than for the trainer, but age may have been a factor: older patients tended to consult the established doctor, whom they knew.

Drugs affecting the cardiovascular system, moderate or strong analgesics, hypnotics, sedatives, tranquillisers, and antidepressants were rarely rejected, but mild analgesics and drugs prescribed for symptomatic relief, such as those affecting the alimentary system, cough mixtures, and skin preparations, were more often rejected.

Introduction

Comaroff *et al*¹ reported that 66% of doctors believe that between 1% and 5% of their prescriptions are not dispensed, while 20% estimated that all prescriptions they write are dispensed.

This paper reports on the numbers of FP10s (National Health Service prescription forms) and items issued by a general practitioner and his trainee during November 1974, and the numbers that were not subsequently dispensed.

Method

A carbon copy was made of every FP10 issued and further information—for example, age, occupation, and diagnosis—was added to each copy. With the help of the Department of Health and Social Security all FP10s dispensed in November and December were returned from the Pricing Bureau. The FP10s issued in November were matched up with the copies. The unmatched copies represented those FP10s not dispensed. Drugs were coded according to the classification in the *MIMS* pharmacological index.

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Findings and comment

A total of 1611 FP10s for 2393 items (1.5 items per FP10) were issued. One hundred and thirteen FP10s for 147 items were not dispensed (7.0% of FP10s and 6.1% of items).

Table I gives details for patients exempt from the 20p per item charge. Almost all the FP10s for patients above and below working age were dispensed. The old people averaged more items per FP10 than the young. Table I also gives details for patients of working age with exemption certificates. Most of these patients suffered chronic illnesses, and this is reflected in the high average number of items per FP10. In the case of the women the picture is distorted by the exemptions for pregnancies. More men than women failed to get their FP10s dispensed but the difference was not statistically significant.

TABLE I—FP10s and items issued to patients exempt from the 20p per item charge

	Boys and girls under working age	People of working age holding exemptions		Men and women of pensionable age
		Men	Women	
Total FP10s	314	100	100	236
Total items	430	186	155	433
Average number of items per FP10 ..	1.4	1.9	1.6	1.8
FP10s not dispensed ..	4 (1.3%)	12 (12%)	4 (4%)	3 (1.3%)

The remaining FP10s were issued to patients of working age who were required to pay the 20p per item charge. Four hundred and fifty-two FP10s for 627 items (1.4 items per FP10) were issued to women, and of these 22 FP10s for 29 items were not dispensed (4.9% of FP10s). As regards the men, 409 FP10s for 562 items (1.4 items per FP10) were issued and 68 FP10s for 85 items were not dispensed (16.6% of FP10s). This difference between men and women was significant ($\chi^2 = 30.5$; $P < 0.001$).

The percentage of undispensed FP10s to these men was higher for the trainee doctor (22%) than the trainer (14%), but the patients seen by the trainee were, on the whole, younger than those seen by the trainer (men in the 25-34 years age range—trainee 32%, trainer 19%), and table II shows that the highest percentage of undispensed FP10s occurred among men in the 25-34 years range. This pattern of the trainee seeing the younger patients is a natural consequence of older patients preferring to consult an established doctor whom they know rather than a young, temporary trainee, and equally of younger patients preferring a young doctor. Women patients showed a similar age pattern (25-34 years age range—trainee 39%, trainer 22%). Consequently it is not possible to say how far the difference in uptake of FP10s between trainee and trainer could be related to the patient's age and how far it could be related to a difference in the doctor-patient relationship.

On separating the miners from the non-miners (those in skilled and semi-skilled manual occupations) it seemed that 27% of miners as against 11% of non-miners failed to get their FP10s dispensed. This

TABLE II—FP10s by age issued to men of working age required to pay 20p per item (dispensed and not dispensed)

Age (completed years):	16-24	-34	-44	-54	-64	Total
Total FP10s	41	93	100	94	81	409
No (%) not dispensed	6 (15)	24 (26)	18 (18)	12 (13)	8 (10)	68 (16.6)

TABLE III—FP10s by age, issued to miners and non-miners in skilled and semi-skilled manual occupations required to pay 20p per item (dispensed and not dispensed)

Age (completed years)	Total FP10s		No of FP10s not dispensed		% of FP10s not dispensed	
	Miners	Non-miners	Miners	Non-miners	Miners	Non-miners
16-24	6	15	2	2	33	13
25-34	26	45	11	10	42	22
35-44	27	36	9	1	33	3
45-54	41	19	10	1	24	5
55-64	36	20	5	1	14	5
Total	136	135	37	15	27	11

difference was significant ($\chi^2 = 10.3$; $P < 0.01$). Details are shown in table III, which also breaks the figures down by age. In both groups the peak age range for undispensed FP10s was 25-34 years but the figures for miners were higher throughout the working-age range.

The nature of the drugs not collected by the working-age men without exemption certificates showed a logical pattern within the limitations imposed by the size of the sample. Drugs affecting the cardiovascular system and moderate or strong analgesics were rarely rejected (3% and 8%, respectively). These drugs tend to be prescribed to the older workers. By contrast, the mild analgesics were rejected in 27% of cases. Drugs prescribed largely for symptomatic relief such as those affecting the alimentary system, cough mixtures, and skin preparations were rejected in 27%, 18%, and 17% of cases respectively, but hypnotics, sedatives, tranquillisers, and antidepressants were rejected in only 6% of cases. It is a matter for concern that 11% of antibiotics were rejected.

Discussion

The overall percentage of undispensed FP10s was close to the figure we had expected at the outset, but some features of the distribution were unexpected. We thought, for example, that old people might fail to obtain drugs owing to the difficulties of getting to chemists. Nevertheless, it seemed that by one means or another these difficulties were overcome.

Most of the undispensed drugs had been prescribed for younger working men, and particularly for miners. A series of earlier studies in this practice have shown a high demand for

sickness certification among miners.^{2,3} They have also shown a distinct drop in medical work load among miners compared with non-miners after retirement at the age of 65 years,⁴ and a marked drop among miners retired early for health reasons compared with age-matched miners who continue at work.⁵ These findings arise out of the necessity to consult a doctor in order to get sickness benefit, but, so far as many of the younger men are concerned, the medical content of the consultation in these circumstances is perceived by them as irrelevant and the medication is rejected.

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Problems of Childhood

Immunisations

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Immunisation policy needs frequent review if it is to remain specifically appropriate for the population concerned. The following recommendations for children are an attempt to strike three balances: between current needs and current resources; between individual and community benefits; and between the risks of immunisation procedures and those of the illnesses they are designed to prevent.

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Diphtheria

Diphtheria vaccine should be given in three doses in infancy with a further dose at school entry (see table). The aim must still be to immunise all the population; immunisation does not prevent the carrier state, so that non-immune individuals are not protected by a high level of population immunity. A few cases still occur unnecessarily every year.

Children in residential institutions should be given a full course of diphtheria vaccine if there is doubt about their immunisation history. Those over 10 years old should first be screened by the Schick test to avoid severe vaccine reactions.

Whooping cough

Although the incidence of whooping cough has fallen as a result of the national policy of immunisation introduced in