

PRESCRIBING IN GENERAL PRACTICE

A study of prescribing in general practice, 1969—1970

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THE drug bill forms the greatest part of the cost of medical services financed through executive councils. The cost of drugs is continually rising and the difference between the cost of providing a general-practitioner service and the cost of the drugs prescribed is continually increasing (Ministry of Health, 1955–1967).

This study investigates prescribing within one practice, the cost of medicines to patients of different ages and sex and the patients' use of exemption from prescription charges.

The priced prescriptions for two complete months (November 1969 and July 1970) were returned from the Joint Pricing Committee for England. One-hundred-and-fifty prescriptions were excluded from analysis in 1969 and 64 prescriptions in 1970 as they were prescribed outside the study months or were prescribed by other practices in the city.

Details of the cost of individual items on the prescription form EC 10, the therapeutic category of the item, whether the patient had claimed exemption from the prescription charge (now 20p) and which doctor had written the prescription were transferred to a punched card with data identifying the patient.

Another punched card was constructed for each consultation during the two study months from information retained in the practice appointments book and visiting book.

TABLE 1
AGE/SEX DISTRIBUTION OF PRACTICE, JULY 1970

<i>Age</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>Total</i>	<i>%</i>
0–9	309	5.8	272	5.0	581	10.8
10–19	225	4.2	274	5.1	499	9.3
20–29	647	12.1	766	14.4	1413	26.5
30–39	300	5.6	300	6.6	600	11.2
40–49	254	4.7	320	6.0	574	10.7
50–59	252	4.7	328	6.2	580	10.9
60–69	242	4.6	302	5.7	544	10.3
70–79	91	1.7	256	4.8	347	6.5
80–89	42	0.8	137	2.6	179	3.4
90–99	4	0.1	27	0.5	31	0.6
Total	2366	44.3	2982	55.9	5348	100.0

Prescription cards and consultation cards were analysed to give information about prescribing.

The practice is situated in the centre of a provincial university city of nearly half a million population. At the time of the study there were two male principals; Dr A who had established the practice over 30 years ago and Dr B, who was 32 and had replaced a resigning partner three years before the study. The practice has been increasing in numbers and in July 1970 had 5,348 patients with an age and sex distribution as in Table 1.

This age and sex distribution differs from the Registrar General's figures for South-west England in three respects: the large number of patients in the 20-29 age range, representing the student and young married population living in flats in the practice area; the large number of elderly ladies and the relatively small number of children. All social classes are well represented with a predominance of social classes I, II, and III (Registrar General's Classification). The consultation rate for the year (1970) was 4.0 consultations per patient per year and the home visit to surgery consultation ratio for the year was 1:4.6.

Much information about practice prescribing is made available to practitioners from the executive council. This is derived from analysis of all priced prescriptions during one month a year. For our practice the following figures were given:

	NOVEMBER 1969			
	<i>Dr A</i>	<i>Dr B</i>	<i>Total</i>	<i>England</i>
Items prescribed	943	968	1,911	
Total cost of items	£697	£707	1,404	
Average number of items per person on list			0.371	0.419
Average cost per item	14s. 10d.	14s. 7d.	14s. 8d.	12s. 10d.
Average cost per person on list			5s. 6d.	5s. 5d.
	JULY 1970			
Items prescribed	1,038	986	2,024	
Total cost of items	£794	£829	£1,623	
Average number of items per person on list			0.379	0.440
Average cost per item	15s. 4d.	16s. 10d.	16s. 0d.	14s. 0d.
Average cost per person on list			6s. 1d.	6s. 2d.

This study is designed to investigate the age and sex variation within these figures. Consultations are only included for patients on the National Health list; temporary patients and private patients are excluded.

Results

1. Frequency of consultations

The age and sex distribution of those patients who consulted during the study months showed the expected peaks in old age with a peak in the 20-39 age range resulting from the peculiar age and sex distribution of the practice (Table 2).

Even after correcting for the number of patients in each age range there is a peak in the 20-39 age range. This results from the very high female consulting rate in this age range, over 42 per cent of the females in this age range consulted in each month studied. This compares with the male consulting rate of less than 20 per cent.

2. Prescribing frequency

Some patients are not given a prescription at a consultation (Table 3).

The incidence of non-prescribing at consultations is higher in the younger age groups particularly in consultations with Dr B. That no medicine is prescribed does not mean, of course, that no treatment is given, some consultations ended with reassurance, some with referral and some were for certification.

TABLE 2
CONSULTATIONS DURING STUDY MONTHS
(a) November 1969

Age	Number of consultations			Number of patients on list (1970) (b)	Consultation as % of total list in each age group (a/b × 100)
	Male	Female	Total (a)		
0-9	58	53	111	581	19.1
10-19	42	75	117	499	23.4
20-29	106	382	488	1413	34.5
30-39	35	113	148	600	24.7
40-49	56	124	180	574	31.4
50-59	68	81	149	580	25.7
60-69	83	104	187	544	34.4
70-79	18	96	114	347	32.8
80-89	13	56	69	179	38.5
90-99	2	8	10	10	32.3
Total	471	1092	1563	5348	29.2

(b) July 1970

0-9	68	68	136	581	23.4
10-19	28	61	89	499	17.8
20-29	103	320	423	1413	29.9
30-39	46	149	195	600	32.5
40-49	39	104	163	574	28.4
50-59	76	107	183	580	31.5
60-69	82	112	194	544	35.7
70-79	27	109	136	347	39.2
80-89	7	54	61	179	34.1
90-99	—	12	12	31	38.7
Total	563	1091	1587	5348	29.7

TABLE 3
INCIDENCE OF NON-PRESCRIBING CONSULTATIONS
November 1969

Dr A

Age	Number of consultations			Number of consultations where no prescription issued			% of consultations where no prescription issued
	Male	Female	Total	Male	Female	Total	
0-9	23	20	45	6	6	12	27.9
10-19	12	36	48	6	13	19	39.6
20-29	35	126	161	14	28	42	26.1
30-39	12	45	57	4	12	16	28.1
40-49	21	72	91	5	11	16	17.6
50-59	23	43	66	8	7	15	22.7
60-69	20	62	82	—	7	7	8.5
70-79	5	31	36	2	5	7	19.4
80-89	6	35	41	2	10	12	29.3
90-99	0	1	1	—	—	—	—
Total	157	471	628	47	99	146	23.2

Dr B

0-9	35	33	68	10	20	30	44.1
10-19	20	39	59	6	25	31	52.5
20-29	71	256	327	42	96	138	42.2
30-39	23	68	91	11	29	40	44.0
40-49	35	52	87	13	6	20	23.0
50-59	45	38	83	9	9	18	21.7
60-69	63	42	105	6	4	10	9.5
70-79	13	65	78	5	10	15	19.2
80-89	7	21	28	—	3	3	10.7
90-99	2	7	9	1	1	2	—
Total	314	621	935	103	204	307	32.9

TABLE 4
REPEAT PRESCRIPTIONS

November 1969

<i>Age range</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
0-9	5	7	12
10-19	2	1	3
20-29	7	10	17
30-39	2	9	11
40-49	7	5	12
50-59	3	4	7
60-69	6	4	10
70-79	4	6	10
80-89	4	10	14
90-99	—	1	1
Total	40	57	97

July 1970

0-9	11	15	26
10-19	8	14	22
20-29	18	27	45
30-39	4	13	17
40-49	5	24	29
50-59	10	16	26
60-69	15	16	31
70-79	5	21	26
80-89	7	9	16
90-99	—	3	3
Total	83	158	241

Some of the consultations in the 10-39 female age range were specifically for private prescriptions for oral contraceptives and for antenatal attendances. This probably accounts for the high incidence of 'non-prescribing' in this group.

Some prescriptions were issued for patients who had not consulted during the two months (see Table 4). These 'repeat' prescriptions form a small part of the total prescriptions issued. More 'repeat' prescriptions were issued in 1970 than were issued in 1969. This may have been due to a liberalisation in our policy of issuing repeat prescriptions.

3. *Cost of prescriptions*

The cost of prescriptions is related to age (Table 5). The mean cost of individual items gradually rises to the 65-69 age range and then decreases. The average cost per patient on list shows that a plateau in cost is achieved for patients aged over 65 years. This is accounted for by the greater number of items prescribed for the older patients. In November 1969 there were 0.33 items prescribed for all female patients over 70 years of age compared with 0.24 items for females 60-70 years. For patients below the age of 50 the average cost of prescriptions per patient on list is below the average cost for all patients. In the age range 20-49 female patients have a higher average cost per patient than males.

4. *Therapeutic category of prescriptions*

The prescriptions were classified into 17 therapeutic categories. Retrospectively this can only be an approximate classification, but some groups are comparable with other surveys.

- | | |
|---------------------------|---|
| 1. Allergic | 10. Respiratory (including antibiotics) |
| 2. Metabolic | 11. Gastrointestinal |
| 3. Haematinics | 12. Urogenital |
| 4. Psychotropic | 13. Dermatological |
| 5. Hypnotics | 14. Musculoskeletal |
| 6. Central nervous system | 15. Preventive |
| 7. Eye | 16. Others (including dressings) |
| 8. Ear | 17. Tonics (including vitamins) |
| 9. Cardiovascular | |

The mean costs of items in these different categories were calculated for July 1970 only and separately for males and females (Table 6).

An examination of some of these therapeutic groups by age is seen in Tables 7-10.

From an examination of the frequency of prescribing in some therapeutic categories (Tables 7-10) it is seen that the peak frequency of prescribing varies according to the category of drug: for drugs acting on the gastrointestinal tract it is in the 60-79 age group; for psychotropic drugs it is in the 40-59 age group and for hypnotics it is more variable, but of a high level in all ages over 40 years.

The prescribing of drugs for respiratory illness, including antibiotics (Table 10) shows a difference in the prescribing pattern for males and females. The former have a peak in the young and the old and the latter have a peak only in the young age range.

5. *Exemption from prescription charges*

The following categories of patient are exempt from prescription charges:

1. Patients under 15 years of age.
2. Patients over 65 years of age.
3. Patients holding a valid exemption certificate from an executive council.
4. Patients holding a current certificate of prepayment of charges to an executive council.
5. Patients who are covered by a Department of Health and Social Security exemption certificate.

TABLE 5
 MEAN COST OF PRESCRIPTIONS BY AGE GROUP
 (in old pence—240d. = £1) Exclusive of dispensing costs
 November 1969

<i>Age group</i>	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
<i>Males</i>										
Mean cost per item	103	78	146	232	168	124	202	152	293	217
S.D.	119	68	113	288	222	85	276	97	438	180
Number of items	16	11	13	8	19	23	19	9	15	18
Total cost	1648	858	1898	1856	3192	2852	3838	1368	4395	3906
<i>Average cost per patient on list</i>	8.11		16.68		9.34		17.35		32.68	
<i>Females</i>										
Mean cost per item	138	123	275	162	186	227	250	416	299	247
S.D.	123	77	265	180	256	295	188	531	324	351
Number of items	16	12	7	19	57	77	30	27	27	38
Total cost	2208	1476	1925	3078	10602	17479	7500	11232	8073	13186
<i>Average cost per patient on list</i>	13.54		18.26		36.66		62.44		66.43	

<i>Age group</i>	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99
<i>Males</i>										
Mean cost per item	520	391	341	548	259	247	458	212	334	—
S.D.	609	371	264	586	379	214	688	63	202	—
Number of items	12	25	23	22	12	8	8	4	2	—
Total cost	6240	9775	7843	12056	3108	1976	3664	848	—	—
<i>Average cost per patient on list</i>	63.55		82.23		55.87		107.43		—	
<i>Females</i>										
Mean cost per item	319	318	397	476	341	291	340	315	149	552
S.D.	316	210	381	388	327	282	325	298	96	391
Number of items	—	—	—	—	—	—	—	—	—	—
Total cost	13079	8586	14615	16184	14663	10476	8160	8190	1043	1656
<i>Average cost per patient on list</i>	66.05		101.98		98.20		119.34		99.96	

TABLE 5—continued

July 1970

<i>Age group</i>	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
<i>Males</i>										
Mean cost per item	171	185	256	206	151	207	217	202	583	374
S.D.	246	251	217	200	150	189	263	167	907	468
Number of items	16	13	15	10	28	29	19	16	12	16
Total cost	2736	2405	3840	2060	4228	6003	4123	3232	6996	5984
<i>Average cost per patient on list</i>	16·64		26·22		15·81		24·52		51·09	
<i>Females</i>										
Mean cost per item	155	158	129	260	262	238	244	316	251	311
S.D.	145	119	123	256	318	457	230	462	200	272
Number of items	18	20	13	16	63	76	45	29	26	39
Total cost	2790	3160	1677	4160	16506	18088	10980	9164	6526	12129
<i>Average cost per patient on list</i>	21·88		21·30		45·16		67·15		58·30	

<i>Age group</i>	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99
<i>Males</i>										
Mean cost per item	373	356	428	537	525	449	454	358	—	—
S.D.	409	371	451	1179	437	439	625	175	—	—
Number of items	24	22	26	33	10	11	8	5	—	—
Total cost	8952	7832	11128	17721	5250	4939	3632	1790	—	—
<i>Average cost per patient on list</i>	66·62		119·21		111·97		129·09		—	
<i>Females</i>										
Mean cost per item	319	373	268	517	398	410	208	365	141	361
S.D.	298	340	255	604	414	454	201	334	134	247
Number of items	47	33	38	43	35	41	22	16	8	2
Total cost	14993	12309	10184	22231	13930	16810	4576	5840	1128	722
<i>Average cost per patient on list</i>	83·24		107·33		120·08		76·03		68·52	

TABLE 6
 MEAN COST OF DIFFERENT THERAPEUTIC CATEGORIES OF PRESCRIPTION (OLD PENCE)
 July 1970

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Allergic	Endocrine	Haematitic	Psychotropic	Hypnotic	C.N.S.	Eye	Ear	C.V.S.	Respiratory	Gastrointestinal	U.G.	Dermatological	Musculoskeletal	Preventive	Others	Tonics
<i>Males</i>																	
Mean cost (old pence)	92	437	39	171	109	214	46	61	313	159	142	186	122	113	28	178	162
Number of items	26	15	5	80	44	27	7	16	64	128	96	12	78	57	3	12	12
Mean cost (old pence)	125	191	86	176	85	153	83	92	203	158	88	206	101	163	44	217	98
Number of items	27	34	64	190	122	60	18	14	93	174	144	84	117	134	8	49	42
Total number of items	53	49	69	270	166	87	25	30	157	302	240	96	195	191	11	61	54

TABLE 7
PRESCRIBING FREQUENCY OF HYPNOTICS

<i>Age group</i>	<i>0-19</i>	<i>20-39</i>	<i>40-59</i>	<i>60+</i>
<i>Males</i>				
November 1969	1	1	9	18
Total consultations in November 1969	100	141	124	116
% of total consultations	1.0	0.71	7.26	15.5
July 1970	—	9	14	17
Total consultations in July 1970	96	149	135	116
% of total consultations	—	6.0	10.4	14.6
<i>Females</i>				
November 1969	2	12	48	59
Total consultations in November 1969	128	495	205	264
% of total consultations	1.6	2.4	23.4	22.3
July 1970	3	16	47	50
Total consultations in July 1970	129	469	211	289
% of total consultations	2.3	3.4	22.3	17.4

Approximately one in five consultations for females over the age of 40 are for hypnotic drugs.

For females in the 40-59 age range a frequency of prescribing at one in three or four consultations occurs for psychotropic drugs but the incidence falls in age ranges below and above this (Table 8).

TABLE 8
PRESCRIBING FREQUENCY OF PSYCHOTROPIC DRUGS

<i>Age group</i>	<i>0-19</i>	<i>20-39</i>	<i>40-59</i>	<i>60+</i>
<i>Males</i>				
November 1969	—	14	25	15
Total consultations in November 1969	100	141	124	116
% of total consultations	—	9.9	20.0	12.9
July 1970	3	27	22	16
Total consultations in July 1970	96	149	135	116
% of total consultations	3.1	18.1	16.3	13.8
<i>Females</i>				
November 1969	2	53	68	39
Total consultations in November 1969	128	495	205	264
% of total consultations	1.6	10.7	33.2	14.8
July 1970	16	66	51	46
Total consultations in July 1970	129	469	211	287
% of total consultations	12.4	14.1	24.2	16.0

TABLE 9
 PRESCRIBING FREQUENCY OF DRUGS ACTING ON THE GASTROINTESTINAL TRACT

<i>Age group</i>	<i>0-19</i>	<i>20-39</i>	<i>40-59</i>	<i>60+</i>
<i>Males</i>				
November 1969	3	10	12	26
Total consultations in November 1969	100	141	124	116
% of total consultations	3.0	7.1	9.7	22.4
July 1970	10	22	23	31
Total consultations in July 1970	96	149	135	116
% of total consultations	10.4	14.8	17.0	26.7
<i>Females</i>				
November 1969	13	33	17	44
Total consultations in November 1969	128	495	205	264
% of total consultations	10.2	6.7	8.1	16.7
July 1970	8	43	24	52
Total consultations in July 1970	129	469	211	287
% of total consultations	6.2	9.2	11.4	18.1

TABLE 10
 PRESCRIBING FREQUENCY OF DRUGS ACTING ON THE RESPIRATORY SYSTEM INCLUDING ANTI-BIOTICS

<i>Age group</i>	<i>0-19</i>	<i>20-39</i>	<i>40-59</i>	<i>60+</i>
<i>Males</i>				
November 1969	34	32	15	34
Total consultations in November 1969	100	141	124	116
% of total consultations	34.0	22.7	12.1	19.3
July 1970	41	34	14	30
Total consultations in July 1970	96	149	135	114
% of total consultations	42.7	22.8	10.4	26.3
<i>Females</i>				
November 1969	35	64	24	30
Total consultations in November 1969	128	495	205	264
% of total consultations	27.3	12.9	11.7	11.4
July 1970	43	56	40	28
Total consultations in July 1970	129	469	211	287
% of total consultations	33.3	11.9	19.0	9.8

Patients with the following conditions are entitled to claim an exemption certificate from executive councils:

1. Permanent fistula.
2. Certain specified endocrine disorders for which specific substitution therapy is essential.
3. Epilepsy requiring continuous anticonvulsive therapy.
4. A continuing physical disability which prevents the patient leaving his residence except with the help of another person.

During 1970, executive councils issued 528,000 exemption certificates for expectant mothers and mothers of babies under 12 months old, 43,000 certificates for patients suffering from the specialised conditions above, and 93,000 pre-payment certificates.

Those exempt on grounds of age at June 1970 were about 10.9 million children under 15 years old and 6.0 million people aged 65 or over. The number of people exempt on grounds of income is estimated to include 1.1 million covered by supplementary benefits and not exempt on grounds of age. In addition 15,000 certificates were issued to those otherwise requiring help on financial grounds. There were also approximately 200,000 under 65 years of age who could claim exemption for prescriptions for the treatment of their accepted war or service disablements (Department of Health and Social Security, 1971).

Not all patients who can do so because of their age claim exemption from prescription charges and in a few instances there is indication of abuse or accidentally claiming exemption when it is not indicated (Tables 11 and 12).

Only six patients in November 1969 and four patients in July 1970 claimed exemption because they had prepayment certificates. Sixteen patients in November 1969 claimed exemption because of possession of a Department of Health and Social Security

TABLE 11

PATIENTS CLAIMING EXEMPTION FROM PRESCRIPTION CHARGES BECAUSE THEY CLAIM THEY ARE LESS THAN 15 YEARS OLD

<i>Age of patient from practice file</i>	<i>November 1969</i>			<i>July 1970</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
0- 4	13	13	26	10	13	23
5- 9	7	12	19	14	13	27
10-14	10	5	15	8	7	15
15-19	4	4	8	2	1	3
20-39	—	1	1	2	1	3
40-59	—	—	—	—	1	1
60-79	—	—	—	—	1	1
Totals	34	35	69	36	37	73
Patients who could have claimed but did not	7	3	10	4	12	16

TABLE 12
PATIENTS CLAIMING EXEMPTION FROM PRESCRIPTION CHARGES BECAUSE THEY CLAIM TO BE MORE THAN 65 YEARS OLD

<i>Age of patient from practice file</i>	<i>November 1969</i>			<i>July 1970</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
20-39	—	1	1	2	1	3
40-64	—	—	—	—	—	—
65-69	10	9	19	19	22	41
70-74	8	32	40	8	21	29
75-79	8	21	29	9	22	31
80-84	7	17	24	6	13	19
85-89	2	15	17	4	11	15
90+	0	6	6	0	6	6
Totals	35	101	136	48	96	144
Patients who could have claimed but did not	11	23	34	10	28	38

exemption certificate and patients in July 1970. More patients hold exemption certificates because of pregnancy or certain specified illnesses (Table 13).

TABLE 13
PATIENTS CLAIMING EXEMPTION FROM PRESCRIPTION CHARGES BECAUSE OF HOLDING A VALID EXEMPTION CERTIFICATE

<i>Age of patient from practice file</i>	<i>November 1969</i>			<i>July 1970</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
0-9	—	1	1	—	—	—
10-19	—	—	—	—	—	—
20-29	1	18	19	1	26	27
30-39	0	9	9	2	11	13
40-49	0	1	1	0	2	2
50-59	2	2	4	3	2	5
60-69	2	3	5	1	4	5
Totals	5	34	39	7	45	52

Apart from expectant mothers and young mothers few patients claim exemption because of specified illness.

Discussion

Muller (1967) states that "Documents relating to drugs and which are generated in the normal course of medical care activities within a country or medical care system, are a

useful and under-utilised source of information on the structures, organisation and quality of medical services”.

Very little use has been made of the prescription issued on EC 10's except for the annual statistics issued in the Annual Report of the Department of Health and Social Security. Dunlop *et al.* (1952) reported the analysis of 17,301 items prescribed during September 1949 from more than 140 doctors. They found that the most common prescriptions were for hypnotics followed by the stomachics, tonics and mild analgesics. Wilson *et al.* (1963) compared the prescriptions written by 32 doctors in Liverpool in February and October and found that there were significant differences in the number of prescriptions issued for respiratory disease in the two months and also for alimentary infections and skin disease. Joyce *et al.* (1968) investigated the prescriptions issued by 93 doctors in three northern towns during one month. They concluded that higher educational qualifications and an orientation towards the whole person on the part of the doctor were associated with lower prescribing of drugs of all kinds.

The present study is an attempt to investigate retrospectively the prescribing patterns in a two-handed general practice.

It is shown that the number of consultations occurring as a percentage of the total number of patients in a given age range in the practice, rises as the age becomes greater. It is also shown that the incidence of non-prescribing at consultations decreases the older the patient. The younger doctor is shown to prescribe less often to patients under 60 years of age than his senior partner, but there is no difference between the doctors for patients over that age.

In common with the only other survey in which prescribing has been related to age and sex (Department of Health and Social Services and Welsh Office 1970) the cost of prescriptions has been shown to be related to age: the mean cost of prescriptions gradually rising to the 65-69 age group and then decreasing.

The cost of individual prescriptions is influenced by two factors: the cost of the drug and the amount of the drug prescribed. Any attempt to relate the cost of prescriptions to age groups must take into account the amount of the drug prescribed on any one occasion. The fact that the mean cost of prescriptions falls in the over-70 year age group requires further examination. The average cost per patient on the practice list over 70 years is greater than any other age group, and the average number of prescriptions issued per patient over 70 is greater than in the 60-69 age range. The fall in the mean cost of prescriptions for the elderly is therefore related to the greater number of prescriptions for smaller amounts of medication.

From an examination of the therapeutic categories of the prescriptions it is seen that the most expensive are the drugs affecting metabolism. This is probably because of the large quantities usually prescribed. Other high cost categories are the psychotropic drugs (excluding hypnotics), drugs acting on the central nervous system, the cardiovascular system, the respiratory tract, and the urogenital system, and appliances and dressings. This is in agreement with the figures quoted in the Annual Report of the Department of Health and Social Security. The cost of individual prescriptions is, of course, related to the quantity of drugs prescribed as well as the nature of the drugs and it is this that makes prescribing so difficult to compare from doctor to doctor.

When the incidence of prescribing for certain therapeutic categories is examined by age of the patients some interesting facts emerge. The incidence of prescribing psychotropic drugs as a percentage of the total consultations in twenty-year age ranges shows a marked peak in the 40-59 age range. This is particularly marked for females. This is in agreement with the findings of Parish (1971). Parish also found that hypnotic drugs are, as would perhaps be expected, prescribed mainly to elderly patients. This survey confirms

this finding. Prescribing of gastrointestinal remedies shows a peak in the 60–79 age range, especially for men. This increase with age is similar to that described in surveys on self-medication (National Opinion Polls, 1965) and Wadsworth *et al.* (1971) and presumably relates to the increased prescribing of laxatives, although Wadsworth describes a peak in complaints of stomach upset and indigestion in the over-70-year-olds

The prescribing of drugs for respiratory illness (including antibiotics) shows that most prescribing occurs at extremes of life for the males. Females appear to escape high prescribing as they get older. The reason for this is obscure as the practice is not situated in an area where bronchitis is common.

The number of patients claiming exemption from prescription charges is surprising in view of the number of patients who did not claim exemption when entitled to do so because of their age. There is very little indication of abuse: of patients claiming exemption because of their age when their age is outside the exemption ranges. The use of pre-payment certificates for claiming exemption from charges is very small.

Since 1960 the cost of drugs issued by the general practitioner has been rising at a greater rate than have the rest of the costs of general-practitioner services. This reversal of the old situation where the cost of consultation was greater than the cost of the medicine has not received great publicity. Because of this reversal and because of the massive size of the drug bill it seems sensible that doctors should be increasingly aware of their prescribing habits. It is perhaps worth asking whether the advances in therapeutics since 1960, particularly regarding the psychotropic drugs, have contributed in any significant way to a lessening in morbidity or mortality.

Summary

A retrospective study of prescribing within a general practice in 1969–1970 has shown that the cost of prescriptions is related to the age and sex of the patients.

The prescribing of some therapeutic groups have also been examined by age groups and shown to have different patterns of prescribing frequency.

There is little evidence of abuse in claiming exemption from prescription charges and some patients who could have claimed exemption because of age did not do so.

The fact that the cost of medicines is now rising at a greater rate than the total cost of the general-practitioner services is sufficient reason for all general practitioners to re-examine their prescribing habits.

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