

Prescribing requirements of the elderly mentally handicapped: future demands on primary health care teams

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SUMMARY. *The medication prescribed for 269 mentally handicapped hospital residents aged 60 years and over on 1 January 1987, including five with Down's syndrome, and for 31 residents aged 50 years or over with Down's syndrome was analysed.*

Fifty of the 269 elderly residents were receiving no medication but the mean number of prescriptions for the remaining 219 was four. Of the total sample of 269 residents, 32% were taking drugs for psychiatric and psychological disorders; 11% regular antiepileptic drugs; 62% long-term drugs for other problems (diuretics and laxatives were the most common); 29% had long-term prescriptions for topical preparations, enemata or suppositories; 23% were on short-term prescriptions for other problems; and 17% had short-term prescriptions for topical preparations, enemata or suppositories. For the 31 Down's syndrome residents the commonest prescriptions were for skin preparations.

Particular care is needed in making a diagnosis and monitoring the effects of treatment on mentally handicapped patients because a complete history and full cooperation on examination may not be forthcoming. These findings have implications for primary health care teams who will be responsible for the mentally handicapped when hospitals close and the residents live in the community.

Introduction

POLICIES recommending care in the community predict that hospitals for the mentally handicapped will close, and the residents who still need residential care will be transferred to small community units. It is likely that in future the medical care of residents who leave large hospitals will be the responsibility of primary health care teams. General practitioners have a critical part to play in any developments in patterns of service for this group of people.¹

In Frenchay health district in Bristol (population 214 000) there are 846 residents in three hospitals for the mentally handicapped. There are plans for the closure of most of the hospital beds and the transfer of the majority of the residents to the community. This would almost double the local prevalence figures for mental handicap in the community.

One way to measure the need for routine medical care among the mentally handicapped is to review prescriptions. The need for prescribed medicines increases with age and a survey of the drugs prescribed for residents aged 60 years or over and for those aged 50 years or over with Down's syndrome in the three hospitals was made during the first week of January 1987.

Method

Residents in the three hospitals aged 60 years or over on 31 December 1986 were identified together with those aged 50 years or over with Down's syndrome. All prescriptions for patients aged 60 years or over that were current during the first week of January 1987 were analysed. Drugs were classified as long term when the drug was prescribed for longer than one month and short term when prescribed for one month or less. Topical preparations for skin, eye and ear diseases, enemata and suppositories were also classified as long and short term. The prescriptions for residents aged 50 years or over with Down's syndrome current during the first week of January 1987 were analysed separately.

All medications issued to the mentally handicapped need a medical prescription; even a simple linctus or mild laxative for use when required is individually prescribed and administration is recorded on drug record cards. All prescriptions are reviewed each month by medical staff.

Results

Populations surveyed

Of the 846 residents in the three hospitals, 269 were 60 years of age or over (including five with Down's syndrome). The age-sex distribution of these residents is shown in Table 1. The majority (84%) had IQs below 50, 9% had no recorded IQ or were untestable owing to sensory handicap and only three had IQs above 70. Nearly two-thirds of these elderly residents (65%) had lived in the hospitals for 50 years or more but the length of stay varied from six to 75 years (mean 55 years).

Table 1. Age-sex distribution of the elderly population.

Age (years)	Number (%) of patients		
	Men	Women	Total
60-69	76 (28)	57 (21)	133 (49)
70-79	39 (14)	48 (18)	87 (32)
80-89	9 (3)	38 (14)	47 (17)
90-99	0 (0)	2 (1)	2 (1)
Total	124 (46)	145 (54)	269 (100)

Thirty-one residents aged 50 years or over with Down's syndrome were identified; 18 were women. Seven were aged 50-54 years, 19 55-59 years, and five 60-64 years. Eight were profoundly mentally retarded (IQ less than 20), 16 severely mentally retarded (IQ 21-34) and three moderately mentally retarded (IQ 35-59). Three residents were untestable and one IQ was not recorded. The length of stay in hospital ranged from 12 to 58 years (mean 42 years).

Prescriptions for residents over 60 years of age

Fifty of the 269 residents (19%) were receiving no medication. The remaining 219 (81%) were receiving 788 medications. One

third were taking one or two drugs only, four-fifths were taking less than six but one resident was taking 11.

Long-term prescriptions. Eighty-seven residents (32%) were receiving 123 drugs for psychiatric disorders of whom 23 were receiving more than one prescription (Table 2). Twenty-four residents only received these drugs when required while 65 (24%) were receiving regular medication. The proportion of residents receiving these drugs did not vary with sex but declined with age — 38% of the 60–69 years age group, 32% of those aged 70–79 years and 23% of 80–89-year-olds (all women). The 11 women aged 80–89 years were interviewed and their case notes reviewed. For nine women the psychiatric disorder was recurrent and/or longstanding. Four patients had affective disorders, four had psychoses and one who was profoundly deaf had episodes of behaviour disorder. The remaining two women had anxiety states and received medication when required. Three of the 11 women also showed evidence of dementia.

Thirty-three residents (12%) were taking 58 antiepileptic drugs. Of these 29 (11%) received regular oral drugs while the remaining four were only prescribed diazepam rectally as required. Fifteen (11%) of the 60–69-year-olds were receiving antiepileptic drugs, 15 (17%) of the 70–79-year-olds and three (6%) of the 80–89-year-olds. Twenty-four residents (nearly three-quarters)

were taking one drug only — 10 carbamazepine, seven sodium valproate, six phenobarbitone and one phenytoin.

One hundred and sixty-eight residents (62%) — 59% of the men and 66% of the women — were receiving 348 long-term prescriptions for drugs for other problems. Those prescribed most frequently are shown in Table 2. The proportion rose from 56% of 60–69-year-olds to 79% of 80–89-year-olds and the two women in the 90–99 years age group were both on medication.

In addition to these, 77 residents (29%) were receiving 117 prescriptions for topical preparations, suppositories and enemata. The most commonly prescribed preparations were suppositories and enemata (32 preparations), then skin ointments (28) and scalp applications (14). Only a few residents (12) were receiving eye or ear preparations. The remaining prescriptions were for antifungal powders, shampoos and bath oils.

Short-term prescriptions. Sixty-two residents (23%) were receiving 79 prescriptions for short-term drugs. The commonest prescriptions were for antibiotics (18 drugs), antitussives (17), anti-diarrhoeal preparations (11) and antiemetics or digestive tract preparations (nine). Other preparations included analgesics, laxatives, sedatives and antihistamines.

In addition to these, 45 residents (17%) were receiving 53 other prescriptions of which 36 were for skin complaints including seven antifungal and eight steroid ointments. Steroid skin preparations were almost invariably prescribed for periods of less than one week. Eye and ear preparations were prescribed for nine patients. The remaining prescriptions were for rubefacients, suppositories, shampoos and bath oils.

Table 2. Long-term drugs prescribed to elderly residents.

	Number of prescriptions
<i>Central nervous system</i>	
Major tranquillizers	81
Minor tranquillizers	21
Antidepressant drugs	13
Lithium	5
Antiandrogens	3
Antiepileptic drugs	58
Sedatives	15
Antiparkinsonian drugs	29
Analgesics	10
<i>Alimentary system</i>	
Gastric preparations including H ₂ antagonists, antacids and antiemetics	27
Laxatives	78
<i>Cardiovascular system</i>	
Diuretics	52
Cardiac drugs	16
Hypotensive agents	9
<i>Respiratory system</i>	
Bronchodilators	20
Antitussives	5
<i>Nutritional drugs</i> ^a	36
<i>Other drugs</i>	
Non-steroidal anti-inflammatory drugs	17
Hypoglycaemic agents ^b	7
Thyroxine	7
Steroids	2
Cytotoxic drugs	2
Allopurinol	1
Carbimazole	1
Antihistamine	1

^aMainly iron preparations and vitamins. ^bOne prescription for insulin.

Prescriptions for residents with Down's syndrome

Twenty-five of the 31 residents (81%) were receiving 69 prescriptions, almost half of which were for topical preparations. Sixteen of the 25 residents were receiving one to three prescriptions and the remainder four to six.

Two residents, both women, were taking chlorpromazine for psychiatric disorders. Four were prescribed antiepileptic drugs — one was given diazepam rectally when required, two were taking sodium valproate, and one carbamazepine. Seventeen residents were receiving 22 long-term prescriptions for other problems, the commonest being for laxatives (10). Four were taking cardiovascular drugs, four central nervous system drugs and four thyroxine. In addition, 18 residents were receiving 35 prescriptions for topical preparations, suppositories and enemata, both long and short term. There were 17 prescriptions for skin preparations, including five for steroid ointments and five for antifungal preparations; 11 prescriptions for scalp applications, shampoos and mouth washes; four for enemata and suppositories; and three for eye preparations. There were six other short-term prescriptions, two for antibiotics.

Discussion

The three hospitals opened in the second decade of this century and two-thirds of the elderly population included in this survey have been resident for over 50 years, admitted during the 1920s and 1930s when such hospitals or poor law institutions were the only alternative to home care. It is likely, therefore, that the residents are a representative sample of the aged mentally handicapped. Probably 90% have IQs below 50 and in the future such a population will be in some form of residential care or known to social services or other agencies. In hospital this population has good medical and nursing care and it is unlikely that they have major unmet medical needs.

The evidence described in this paper indicates that a high proportion of mentally handicapped elderly people who are at present in hospital require a number of drugs because of continu-

ing medical problems. Consequently they will need close supervision by primary health care teams if they are discharged into the community. General practice studies of prescribing for patients over 65 years of age suggest that between 72% and 87% are on regular drug therapy.²⁻⁶ Such studies may exclude self-medication, for example with laxatives, which in this study are included. Many elderly people receive multiple prescriptions, probably a third taking more than three drugs a day. In this study the frequency of multiple prescribing was higher than that reported in general practice but similar to that reported in studies of prescribing in homes for the elderly where on average residents were taking between two and eight drugs.⁷ The present study also included all drugs prescribed for use when required although some were administered very infrequently. There is evidence that over half of the drugs prescribed for use when required have not been taken within 60 days.⁸

Elucidating a history from an informant, and performing a physical examination of a mentally handicapped patient takes much longer than for a patient of normal intelligence. It is also difficult to evaluate the significance and the severity of symptoms. Mentally handicapped people react unpredictably to drugs and more care is needed in estimating the doses and in observing side effects than in the normal elderly population.⁹

Medical care of the elderly mentally handicapped needs special consideration. When living in the community their medical care is the responsibility of the primary care team. Livingstone¹⁰ suggests that special provision may need to be made for this group of people and makes a plea for the retention of hospitals for the mentally handicapped:

'Hospitals ... can and should be a source of help for mentally handicapped people in the outside community, not only from the point of view of investigative help and day facilities but also as a potential haven in times of need'

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