

# An investigation into private sector nursing and residential home care for the elderly in north Wales

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**SUMMARY.** In January 1984 two questionnaires were sent to private homes for the elderly in an area of north Wales with a high concentration of private beds. The first questionnaire was completed by eight nursing homes and 13 residential homes for the elderly and the second questionnaire for each of 321 residents — 154 in the former and 167 in the latter.

The two types of homes were compared for staffing levels, facilities available and the degree of dependency of residents. As expected the degree of dependency of the residents in nursing homes was higher than in residential homes but even so the degree of dependency in residential homes was found to be high. The isolation of many residents was evident. Twenty three per cent of residents had come directly to the homes on moving into the area. The problems arising for general practitioners visiting a number of different homes and for homes having many different doctors visiting are highlighted.

The need for adequate consultation and assessment prior to admission and periodic reassessment is demonstrated in the light of the recent changes to the supplementary benefit regulations. It was found that at least 20% of the residents had their fees supplemented by the Department of Health and Social Security. The need for greater collaboration between the two different registration authorities under the new legislation (Registration of Homes Act 1984) and with the general practitioners providing general medical services is demonstrated.

## Introduction

THE growth in the numbers of the very elderly (those over 80 years of age) requiring a high degree of support, often residential, is likely to continue in many countries for the foreseeable future.<sup>1</sup> Their need for residential care can cause problems and various solutions have been put forward.<sup>2,3</sup>

In England and Wales there are traditionally part III accommodation and long stay hospitals. However, the growth in public sector provision has fallen markedly behind the demand created by the growth in the numbers of dependent elderly people.<sup>4</sup> In the present political and financial climate with emphasis on care in the community<sup>5</sup> public sector provision is unlikely to be expanded to any great extent. To fill the vacuum, the last few years have seen a boom in private nursing homes and more especially residential homes. However, surprisingly little study has been made of them. These private homes are now regarded by hospital specialties, both acute and chronic, as a means of relieving the strain placed on hospital beds<sup>6-9</sup> by social services with fully occupied homes, and an increasing percentage are being financed by public funds (attendance allowance and supplementary

benefit). Therefore, more attention must be paid to the facilities and standard of care they provide for residents.

Admission to private homes is usually made without proper medical or social assessment of the suitability of the home for the resident and vice versa.<sup>10-12</sup> In some areas the large choice of homes and the inability of the potential resident or his family to make adequate enquiries, especially when admission is governed by cost, make mis-matching frequent.<sup>13</sup> The condition of residents often deteriorates after admission and consideration must be given to what form the initial assessment and subsequent reassessment should take and who should undertake them.

The growth in the number of homes in an area and the increasing dependency of the residents have a considerable effect on the provision of general medical services. This factor does not appear to have been adequately considered.

The aim of this study was to investigate the staffing levels, facilities provided and dependency of residents in private homes for the elderly in an area with a three-mile radius on the north Wales coast. The area surrounds the group practice of one of the authors (H.I.H.), straddles two health authorities and two local authorities, and has over 1000 beds in 12 private nursing homes and 43 private residential homes but only 139 beds in four local authority homes.

## Method

In January 1984 two questionnaires were sent to the proprietor or matron of each private home in the study area — one asking for details of the home and the other for details of individual residents. A letter accompanied the questionnaires explaining the aims of the survey and stressing the strict confidentiality of the information. Approval of the ethical committee of the health authority was obtained prior to the survey and local general practitioners were informed.

Of 12 private nursing homes for the elderly eight (67%) responded, and of the 43 residential homes 13 (30%) responded. These homes had 154 and 167 residents respectively at the time of the survey. The low response rate, particularly from the residential homes, was investigated.

Since 65 (20%) of the residents surveyed are patients of the group practice of one of the authors (H.I.H.) and 14 (67%) of the homes are visited by doctors from this practice the answers given in the questionnaire were checked against the doctors' professional and personal knowledge of the residents and the homes.

The questionnaire for the homes comprised 48 questions which asked for information about the facilities provided, the charges and occupancy rates, the qualifications of the staff and the role of community nursing services. The questionnaire for the residents comprised 44 questions asking for information about their state of health and dependency, their drug treatment and their general practitioner. The returned questionnaires were checked for anomalies and inaccuracies and doubtful answers were queried with the homes concerned. The data were then coded and entered on the DEC-10 computer at the University College of North Wales, checked for accuracy and analysed using the Statistical Package for the Social Sciences.

## Results

### *Reasons for non-response and accuracy of answers*

The reasons for non-response included reluctance to divulge confidential information and the workload involved in filling in the questionnaires. Some home owners consulted their professional association and took legal advice before deciding not to participate in the survey.

The answers seemed to be reasonably accurate and factual in most cases and the homes appeared to represent a good cross-section of those in the area.

### *Details of homes and facilities provided*

The 21 private homes were registered for between eight and 50 patients and only one was registered for mental patients. Nine of the homes had opened since 1980 and 15 had been under their present management since 1980.

All 13 residential homes and six of the eight nursing homes had a separate communal dining room and a separate lounge. All the homes were on at least two floors but only five residential homes and five nursing homes had a conventional or stair lift. Six residential homes and six nursing homes had telecom/emergency bell systems in each room. A number of homes had other special facilities including bath hoists (four homes), en suite hot and cold water/shower/bathroom (three homes), visiting hairdresser/chiropractor/physiotherapist (two homes), library/quiet room (two homes), television in every room (one home) and incontinent unit (one home).

### *Charges*

Charges in residential homes ranged from less than £70 to £130 per week with the majority of the residents (68%) paying between £70 and £90. In the nursing homes the charges were significantly higher ( $\chi^2=195.6$ ,  $P<0.001$ ) with only one resident paying less than £90 per week, 51% of residents paying between £110 and £130 and a further 20% paying more than £130 per week.

Thirty three of the 167 residents in residential homes and 24 of the 154 residents in nursing homes were known to have their fees paid by the Department of Health and Social Security under supplementary benefit arrangements. Information was not available for 29 residents.

### *Attendance allowance*

Of the residents in nursing homes 46% received full attendance allowance and a further 14% received partial payments. In residential homes the figures were 29% and 25%, respectively.

### *Occupancy*

Six homes reported over 90% occupancy over the previous 12 months. A further 10 homes reported between 75% and 90% occupancy and two newly established homes reported less than 50% occupancy. Only one nursing home and four residential homes took day care clients.

Nursing homes provided single rooms for 86 of their residents (56%) compared with 80 (48%) in residential homes. The figures for occupancy in rooms containing three or more beds were 31 (20%) and 29 (17%), respectively.

### *Qualifications of owners and staff*

Seven nursing home owners had a registered nursing or medical qualification and they employed 19 full-time and 19 part-time qualified nursing staff between them. The nursing home owner without relevant qualifications employed seven qualified staff. The ratio of residents to qualified staff in the eight homes was

3.4:1. In the residential homes six owners had registered qualifications and they employed one full-time and three part-time qualified staff; the ratio of residents to qualified staff was 16.7:1. Of the remaining seven homes, six did not employ any qualified nursing staff.

In addition, all eight nursing homes had a qualified nurse on duty every night as legally required, while seven of the 13 residential homes had a qualified person on duty or available on call.

### *Community nursing services*

None of the nursing homes received any help from the community nursing services. However, eight of the residential homes received help, mainly for injections but other services were provided occasionally.

Two nursing homes and 11 residential homes indicated that they would make use of help from the community nursing services if it were available and six nursing homes and 11 residential homes stated that they would welcome access to the services of a senior specialist nurse in an advisory capacity. Similarly, the majority of the homes — seven nursing and 10 residential — stated that they would welcome facilities for the in-service training of their unqualified staff and for updating the training of their qualified staff.

### *General practitioners*

Two group general practices each had patients in 14 homes, another two group practices each had patients in 13 homes and three practices each had patients in nine homes. Three hundred and eight patients in the homes were registered with 27 doctors giving a ratio of 11.4 patients to one doctor. Some homes were visited by as many as 15 doctors from seven different practices. Thirteen residents were said to be registered with doctors other than the 27 doctors considered to be normally practising in this area.

### *Age and sex of residents*

As expected the percentage of women residents was higher than that of men — 77% in nursing homes and 85% in residential homes.

The age distribution of the residents in both types of homes was fairly similar with a range of 39 to 99 years, a mean value of 83.0 years ( $\pm$  standard deviation 8.5 years), 29% of residents aged less than 80 years, 54% aged 80 to 90 years and 17% aged more than 90 years.

### *Source and type of admission and number of visitors*

Most residents in both types of homes had lived within 15 miles of the home for more than five years. However, 23% of residents — 28% of those in nursing homes and 18% in residential homes — had come directly to the home on moving into the area.

Of the residents admitted to nursing homes 43% were admitted directly from their own homes and a further 30% from hospital. The corresponding figures for residential homes were 58% and 20%, respectively.

The majority of the residents had been initially admitted as permanent residents — 73% in nursing homes and 87% in residential homes.

Many residents had few if any visitors — 28% of those in nursing homes had less than one visit a week and 17% had a visitor rarely or not at all. The percentages for those in residential homes were comparable at 36% and 15%, respectively.

### *Dependency of residents*

The dependency of residents was assessed using a number of criteria and these together with the significance of the relationships between the criteria and the type of home are summarized in Table 1.

**Table 1.** The dependency and the drug treatment of the residents in nursing homes (total  $n=154$ ) and in residential homes (total  $n=167$ ) together with the significance of the relationship between the criteria and the type of home.

	No. (%) of residents			
	Nursing homes	Residential homes		Significance
<i>Degree of dependency</i>				
Complete	67 (43)	29 (17)		$\chi^2=30.5$ , $P<0.001$
Substantial	58 (38)	71 (43)		
Little	20 (13)	48 (29)		
None	9 (6)	18 (11)		
<i>Incontinence</i>				
Fully continent	55 (36)	97 (59)		$\chi^2=23.6$ , $P<0.001$
Occasionally incontinent	42 (28)	45 (27)		
Often incontinent (by day, night or both)	54 (36)	23 (14)		
<i>Indwelling catheter</i>	14 (9)	11 (7)		NS
<i>Mobility</i>				
Bedbound	2 (1)	5 (3)		$\chi^2=18.4$ , $P<0.001$
Chairbound	39 (25)	15 (9)		
Walk with Zimmer	21 (14)	34 (20)		
Walk with support	30 (20)	27 (16)		
Walk unaided	62 (40)	85 (52)		
<i>No. of medical conditions<sup>a</sup></i>				
0	2 (1)	37 (22)		$\chi^2=37.4$ , $P<0.001$
1	75 (49)	81 (49)		
2+	77 (50)	49 (29)		
<i>Mental state</i>				
Mentally alert	47 (31)	69 (42)		$\chi^2=10.4$ , $P<0.05$
Occasionally forgetful	42 (27)	45 (27)		
Often confused	37 (24)	40 (24)		
Severely confused	28 (18)	12 (7)		
<i>Eyesight</i>				
Good	77 (50)	93 (56)		NS
Poor	69 (45)	56 (34)		
Registered blind or partially sighted	8 (5)	17 (10)		
<i>Hearing</i>				
Good	102 (66)	109 (66)		NS
Poor	42 (27)	52 (31)		
Profoundly deaf	10 (7)	5 (3)		
<i>Good verbal communication</i>	99 (64)	129 (78)		$\chi^2=7.0$ , $P<0.01$
<i>Regular care by dentist</i>	44 (29)	32 (19)		NS
<i>Taking tranquillizers or mood modifying drugs</i>	53 (35)	41 (25)		NS
<i>Regular nightly sedation</i>	62 (40)	70 (42)		NS
<i>No. of drugs prescribed</i>				
0	14 (9)	21 (13)		NS
1	22 (14)	31 (18)		
2	31 (20)	45 (27)		
3	27 (17)	22 (13)		
4	24 (16)	24 (14)		
5	14 (9)	13 (8)		
6+	22 (15)	11 (7)		

NS = not significant. <sup>a</sup>The most common medical conditions were senility, arthritis, heart condition, stroke, diabetes, poor hearing and poor eyesight.

### Drug treatment

Drug treatment forms a major part of the care provided in residential and nursing homes and as would be expected many of the residents were prescribed multiple drugs including tranquillizers and mood modifying drugs (Table 1). Only three of the residents in nursing homes and 22 in residential homes could fully or partly look after their own medication.

There were highly significant relationships between various criteria of mental impairment and the use of tranquillizers or mood altering drugs. Residents in both homes taking these drugs appeared less mentally alert and more confused ( $\chi^2=23.3$ ,  $P<0.001$ ), less aware of their surroundings ( $\chi^2=16.7$ ,  $P<0.001$ ) and more often incontinent ( $\chi^2=9.3$ ,  $P<0.01$ ) than those not taking them — the effects in the nursing homes were more significant than in the residential homes. It was not possible, however, to determine how much of the residents' mental impairment was due to the effect of the drugs and how much was the result of the conditions for which they were prescribed.

### Discussion

A typical resident in the homes studied is a very elderly woman, who was admitted initially as a permanent resident, is not very mobile, is highly dependent on the staff, is often incontinent and mentally confused and has very few visitors.

The degree of dependency of residents was found to be very high in both types of home (Table 1) and this was confirmed by the numbers of residents receiving attendance allowance. Given that the dependency of residents in nursing and residential homes is in many cases similar it is surprising that the provision of qualified staff is very different. It may be that staff do not need to have registered qualifications but they do need to be trained and experienced. Some homes admitted that they sometimes had to look after residents longer than they wished or felt able to. The majority of owners are aware of their deficiencies and are anxious to upgrade the standard of nursing and general care of their residents. Interested bodies and licensing authorities, both centrally and locally, must provide the necessary advice and facilities for such upgrading.

In the recent survey carried out in Edinburgh<sup>12</sup> it was found that only 5% of residents came from outside the area, whereas the corresponding figure in this study was 23%. The mean age of 83 years was similar to that found in the Edinburgh study but a higher proportion of the sample in this study (19%) were men, although this proportion is still insufficient to provide adequate male company in many homes. The sources of admission were similar in the two surveys but the fees charged were lower in this survey and a higher proportion of residents had no visitors. This can pose a major problem in that many residents do not have anyone outside the home who can supervise them. While some residents have close relations or next of kin, they may live a considerable distance away, may not visit frequently or may be equally aged and unable to help. There may be little opportunity to talk confidentially in many homes and because many residents are sometimes confused their anxieties and unhappiness are not always taken seriously or acted upon. Sixteen per cent of the residents in this survey had no visitors and this has considerable implications for the general practitioner who is often the only independent person visiting these residents.

All residents are entitled to the same care from general practitioners, community nurses, health visitors and social workers as they would receive in their own homes. However, in practice the official agencies other than the general practitioner are rarely involved after admission, even if they made the original arrangements. In most cases the residents' existing general practitioner will continue to look after them if the home is within

his practice area. While this is beneficial to the resident, problems do arise when doctors are visiting many homes and homes have many visiting doctors. No one general practitioner is responsible for the home or its standards or medication routines. Doctors visiting a home do not always know the name, qualification or experience of the members of staff they see and adequate information on the condition of the resident is not always available. These problems are obviously greater in residential homes than in nursing homes but are not absent in the latter. In this area of north Wales the total general practice workload from homes is becoming unacceptably high. In some areas homes have appointed doctors to advise and supervise on a retainer basis. However such arrangements must be entered into with considerable caution because of contractual difficulties associated with the general practitioners terms and conditions of service.

Supervision by licensing authorities has not been adequate in the past and the extent of health problems in residential homes suggests that health authorities should be involved. However under the Registration of Homes Act 1984 this need only happen for homes which opt for the new dual registration.

It has been shown that for most residents suffering from multi-pathology drug treatment is a basic part of the care provided. Drugs are prescribed and dispensed separately for individual patients but the issuing of potent drugs by untrained staff in residential homes gives cause for concern. Furthermore many homes have no formal medication sheets to check and record the drugs given out. However, since this survey was carried out a number of homes have produced such records.

The relatively widespread use of tranquillizers and mood modifying drugs also gives cause for concern. The condition of some patients makes these drugs an essential part of their treatment but in other cases, medication makes care easier for staff. Doctors visiting a home for a short period have to take on trust the information given to them by the members of staff.

Over half of the residents surveyed here had single rooms. The latest guidelines suggest that most residents should be in single rooms and this will mean a considerable reduction in total bed complement for some homes and may affect their viability. A single room may be a good idea for the ambulant resident who can visit a communal lounge and dining room but could lead to isolation for the chair or bed-bound resident who is well enough to enjoy company.

A major defect in most homes appears to be the absence of any rehabilitation programme — physiotherapists and occupational therapists are rarely available. This is a major deficiency, particularly as patients are often discharged from hospital before rehabilitation is complete.

It is clear from this study that residents do not fall into neat categories for the type of care they need, nor is their condition static. Dual registration will be helpful if taken up generally as it will allow residents to have more nursing care without having to move from a residential home to a nursing home. However, in practice this will provide additional problems for both general practitioners and the registration authority. The new legislation is timely and licensing authorities will have a major role to play in ensuring its effectiveness.

## References

- Andrews K. Demographic changes and resources for the elderly. *Br Med J* 1985; **290**: 1023.
- Smith T. Denmark: the elderly living in style. *Br Med J* 1983; **287**: 1053-1055.
- Smith T. Care for the elderly in the Netherlands. *Br Med J* 1984; **288**: 127-129.
- Grundy E, Arie T. Falling rate of provision of residential care for the elderly. *Br Med J* 1982; **284**: 799-802.
- Humphreys HI. Care in the community. *J R Coll Gen Pract* 1984; **34**: 361-362.
- Godber C. Private rest homes — an answer needed. *Br Med J* 1984; **288**: 1473-1474.
- Andrews K. Private rest homes in the care for the elderly. *Br Med J* 1984; **288**: 1518-1520.
- Bhwomick BJ, Arnold JP. The blocked bed syndrome — a possible remedy. *Geriatric Medicine* 1984; **14**: 44-45.
- Humphreys HI. Private nursing homes: more problems than solutions. *Geriatric Medicine* 1985; **15**: 7.
- Roe P, Guillem V. The need for medical supervision in homes. *Health and Social Services Journal* 1978; **88**: 168-169.
- Wilkin D, Evans G, Hughes B, Jolly D. The implications of managing confused and disabled people in non-specialist residential homes for the elderly. *Health Trends* 1982; **14**: 98-100.
- Primrose WR, Capewell AE. A survey of registered nursing homes in Edinburgh. *J R Coll Gen Pract* 1986; **36**: 125-128.
- Dodd K, Clarke M, Palmer RL. *Misplacement of the elderly in hospital and residential homes*. London: HMSO, 1980: 74-76.

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## SIR JAMES MACKENZIE, MD 1853–1925 GENERAL PRACTITIONER

Sir James Mackenzie was the doyen of general practitioners, certainly the greatest general practitioner of his day, and with a strong claim to being the greatest of all time. His practical experience in Burnley, his internationally important clinical research, and his great skill as a teacher have set an example to the whole profession.

The definitive biography of Mackenzie, written by Professor Alex Mair, has been out of print for some time, but it has now been republished by the Royal College of General Practitioners by photo-reproduction, with the addition of a new chapter, which describes academic developments in general practice since Mackenzie's death.

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