Middle Articles

CONTEMPORARY THEMES

Greenmount House: a Two-year Study of a Hostel for the Elderly Mentally Infirm

P. O. NICHOLAS,* M.B., CH.B., D.C.H., D.P.H.; R. A. JOHNSON,† M.S.M.W.O.

Brit. med. J., 1966, 2, 999-1002

In the past elderly men and women who were mentally rather than physically infirm often ended their days in mental hospitals. In recent years there has been a change. The Royal Commission on the Law relating to Mental Illness and Mental Deficiency (1957) which culminated in the Mental Health Act, and the various Ministry of Health circulars leading to the 10-year plans for local-authority and hospital services, have emphasized the need for community rather than hospital care. Tooth and Brooke (1961) have shown that if alternative accommodation were provided for patients aged 65 and over the estimated number of mental hospital beds would fall dramatically, particularly in regard to female patients, for whom the number of beds required might be reduced by nearly 50%.

Over recent years every effort has been made in the County Borough of Bolton to establish a district psychiatric service (Leyberg, 1959), and there is increasing cooperation between the mental hospital service and the local health authority. In considering the development of community services priority was given in Bolton to the provision of residential accommodation for the elderly mentally infirm, which led to the opening of Greenmount House in 1963. Phillips (1966) found that there were only 15 such hostels distributed among 13 authorities in England and Wales.

Need for Residential Accommodation for the Elderly Mentally Infirm

In 1963 Bolton, with a population of 159,780, had 20,400 people over 65 years of age, and though the provision of welfare hostel accommodation was improving there were elderly people who were too mentally confused to live in these homes. Views differ on where the elderly infirm should live, but the National Corporation for the Care of Old People (1963) agreed that special residential accommodation was needed but were unable to say on what scale, or what form it should take. Ministry of Health circular 9/59 stated that the Royal Commission on the Law relating to Mental Illness, 1957, did not recommend large houses or hostels, but had in mind 20 or 30 residents, with a maximum of not much over 50. More recently the Ministry has favoured the 30-bed hostel. Phillips (1966), as a result of a country-wide inquiry, found that in seven hostels for the elderly mentally disordered built by some county authorities in England the number of places at each hostel varied from 29 to 48, with an average of 37. In 1963 it was felt that a 50-place

hostel was necessary for the immediate needs of the elderly mentally confused in Bolton. It may well be that the estimated number of places required will vary with the area being considered, and it is interesting that, in Croydon, Wright (1965) quoted a figure of 34 per 100,000 population.

A survey carried out by the Borough Engineer for Bolton (McKellen, 1960) showed that there was a considerable movement of population from Bolton. Almost one-quarter of those leaving were single persons, many of whose parents still lived in the old home in Bolton. In addition, a number of families of three, four, and five persons with the head of the family under 40 years of age had left. Thus it was expected that many of the ageing relatives would be on their own and that isolation would contribute to psychiatric upset. Hence the need, when planning geriatric services, to provide residential accommodation for the elderly mentally disordered. It is interesting that a more recent survey of elderly people in Bolton shows that 84% still have contact with and visits from their relatives. This contact, however, is not always sufficient to meet the need of caring for elderly people in prolonged illness or disability.

The need for Greenmount House was emphasized by many mentally disturbed elderly people receiving adequate supervision in the day hospital or from relatives in the daytime, but often being alone at night and thus at some degree of risk. There were other mentally infirm persons who could not manage at home even with help from relatives and friends. The family doctors found that regulating the dose of sedatives was difficult at home, whereas in the hostel it was hoped, and it has been found, that medicines could be given regularly and in adequate doses. Some elderly Bolton residents who did not require hospital nursing or hospital treatment were occupying much-needed beds in mental hospitals.

Type and Construction of Building

In designing a suitable hostel it was considered impracticable to convert an existing building, and thus Greenmount House was purpose-built to accommodate 50 people.

To follow recent Ministry policy and to have built two units for 20 and 30 residents would have required double the number of experienced senior staff as for a hostel of 50 persons. Senior staff with psychiatric nursing experience, difficult to obtain in industrial areas, have been appointed at Greenmount House and have contributed greatly to the success of the project. It has been possible to recruit adequate attendants for active duty day and night. A hostel for more than 50 elderly people

* Deputy Medical Officer of Health, County Borough of Bolton.
† Chief Mental Health Officer, County Borough of Bolton.

would lose the homely atmosphere and make it difficult for the staff to take a personal interest in the residents.

The hostel is a two-storey building, and most of the dormitory accommodation is on the first floor in one-, two-, three-, and four-bedded rooms (Fig. 1). There is no segregation of male and female residents into corridors; men and women have bedrooms next to each other. The idea of 12-bedded wards was considered, but the smaller units have proved more acceptable. The four-bedded rooms are the most popular. Rooms with three beds are unsatisfactory, as one person feels excluded. The two-bedded rooms are acceptable, but the demand for single rooms and privacy has been small. Single rooms are not necessarily suitable accommodation for confused persons, particularly the schizophrenic, who already have a tendency towards isolation, with consequent deterioration. The cultural pattern of the area, with the close living of the Lancashire people, may explain the popularity of the four-bedded rooms.

Two further bedrooms of four beds and two beds respectively, with an observation-room between for a night attendant, serve as a unit for the more-disturbed residents and those being nursed through sickness. When first admitted to the hostel some wander at night or are restless and obstreperous, so it is useful for them to be kept under observation while their response to sedative drugs is being assessed.

Much of the lounge accommodation is on the ground floor, and care has been taken to produce a homely, warm atmosphere. Men and women mix freely in the sitting-rooms and share television and other recreational activities. It could be said that a large hostel for 50 residents creates an institution and not a home. However, to discourage the old people from sitting around the walls, care has been taken in the design of the main lounge (Fig. 2), which has a central pillar with

an electric fire breaking the large area; and additional small sitting-rooms are also provided. Thus the elderly gather in groups, often related to their social status—the professional people in one group, the artisan elderly in another.

Originally there were two small lounges on the first floor. One of them had a pleasant view of the countryside. Aesthetically this would seem very satisfactory, but in practice this room was not used. The residents preferred the other lounge, which looked out over the front drive, where they could see the tradesmen and visitors coming and going. It is important in the rehabilitation of the elderly confused to give them a changing human scene. The tendency to build old people's bungalows looking out on to a desolate green away from the

FIG. 2.—Main lounge, showing central pillar.

traffic does not necessarily help mental health—it is much better that they should overlook some scene of daily human activity. The unused sitting-room has therefore been converted to a two-bedded room, and this has enabled the two single rooms next to the observation unit to be used for short-stay care.

Two sluice-rooms provide some drying-space, but a laundry service for soiled bedding is essential. This is provided for Greenmount House, as it is for the Bolton District Nursing Service, by the laundry at the Bolton District General Hospital.

Staffing in Greenmount House

Well-trained staff are most important, and in Greenmount House the superintendent and matron, a married couple, are both S.R.N.s with mental-nursing certificates, and they have had recent experience in a large mental hospital. Their well-equipped bungalow is adjacent to the hostel, but far enough away to afford privacy and relaxation. The assistant matron is an S.E.N. and has a small flat attached to the hostel. The chef and his wife, who is an attendant at the hostel, have a three-bedroomed bungalow in the grounds. The appointment of a chef has proved most satisfactory.

There are seven full-time day attendants—five on duty every morning when the work is heaviest, and four in the afternoons. Part-time attendants cover evening and night duty. Experience has shown that good accommodation attracts excellent staff.

The consultant psychiatrist supervises the mental health of the residents in the hostel. They have their own general practitioners, though the majority are on the list of a general practitioner who was previously a clinical assistant attached to a mental hospital. It is helpful to have a doctor who has experience in the use of antidepressant and tranquillizing drugs.

FIG. 1.—Plan of Greenmount House.

Selection of Residents for the Hostel

The admissions to Greenmount House were from mental or geriatric hospitals, from Part III accommodation,¹ and from their own or relatives' homes (Tables I and II). Most of the residents were to require permanent care.

TABLE I.—*Applications for Admission from 9 December 1963 to 31 December 1965*

	Males	Females	Total
Admitted for permanent care ..	15	51	66
" short-term care ..	—	14	14
Awaiting admission ..	—	14	14
Unsuitable applicants ..	15	29	44
Total applications ..	30	108	138

TABLE II.—*Source of Admissions*

Admitted from:	Males	Females	Total
Mental hospital ..	4	7	11
General hospital—psychiatric unit ..	7	11	18
" geriatric unit ..	1	4	5
Part III accommodation ..	1	6	7
Own home—living alone ..	—	18	18
Relative's home ..	1	5	6
Salvation Army hostel ..	1	—	1
Total admissions ..	15	51	66

Initial assessment was made by the mental welfare officers in conjunction with the consultant psychiatrist to determine the precise social and psychiatric need. Opinions of other consultants, general practitioners, nursing staff, and social workers were taken into account where these were available.

The superintendent or matron of Greenmount House, and a mental welfare officer, visited all prospective hostel residents. This gave the superintendent an opportunity to make an assessment of the resident's needs and previous environment and helped in fitting the new resident into the life of the hostel. If the elderly person was thought to be too physically ill or incontinent he was accepted for a trial period only. As Eaton and Wittson (1962) state, elderly people adjust best when they know what to expect and are well prepared for it.

As this is a local-authority hostel and is part of community care, the medical officer of health is the final arbiter where there is a difference of opinion over the suitability of a resident. Shortage of hospital and other local-authority accommodation is not the only factor that determines the need for admission; there may well be more disturbed elderly mentally infirm people living at home.

Some residents admitted to the hostel were under 65 years of age: the youngest is 53, the oldest nearly 90; the average age of all the residents is 73. There is no lower age limit. Often the mentally subnormal person ages prematurely, as does the burnt-out, passive schizophrenic. The residents of younger

TABLE III.—*Medical Diagnosis on Admission*

Diagnosis	Males	Females	Total
Senile or organic dementia ..	7	25	32
Subnormality plus depression ..	1	5	6
Manic-depression psychosis (mainly recurrent or reactive depression) ..	2	9	11
Paraphrenia ..	1	1	2
Schizophrenia ..	2	10	12
Obsessional neurosis ..	—	1	1
Drug addiction ..	1	—	1
Not mentally disordered ..	1	—	1
Total ..	15	51	66

age with greater physical activity act as a stimulus to the much older residents—they help the old ladies to their chairs and act as unofficial doormen. Indeed, they encourage an interdependence among residents. Table III gives the medical diagnosis of the mentally infirm on admission. The one

admission who is not mentally disordered is the husband of a female resident. He was already in Part III accommodation, but was finding it increasingly difficult to visit his wife, and was transferred to Greenmount House to be near her, though they do not share a room because the wife is so mentally disturbed.

Health of the Residents

Since admission many of the residents have improved in physical health—in one or two diabetes mellitus has been controlled, and in others severe anaemia corrected. The old schizophrenic who previously shuffled round a court in a mental hospital in a depressed state, talking to his voices, is now much happier in the active and full life of the hostel and local community. The residents are assisted by retired parishioners of the local church, who accompany them on walks, by visits from young people in the near-by school, and by constant attention from the various officers of the local authority. Apart from the people outside who give the mentally infirm new hope, the staff ensure that the residents receive their prescribed medication. The majority require only small amounts of sedative to relieve their mental disorder sufficiently to enable them to enter the community. Some of the old people go shopping in the town, alone or accompanied by members of the staff. The residents are encouraged to help with the housekeeping and the gardens, and have opportunity for occupational therapy, some of which is linked with that provided at the mental-health training centre.

Incontinence is a distressing problem for the elderly people in the hostel; this can upset the homely atmosphere. At the time of writing 17 of the residents have some degree of incontinence. Some of these mentally infirm have deteriorated and may soon need hospital treatment, but there is a shortage of hospital beds.

Discharge Rate of Residents from the Hostel

As will be seen from Table IV, the discharge rate from the hostel has been low. Many of the residents come from intractable home situations. There was a low initial death rate on admission to the hostel—it was thought that removal from home might have caused the death of some of the elderly mentally infirm. Nine residents became too ill for hostel life and had to be admitted to hospital, but those elderly mentally infirm who were well enough to be discharged to welfare hostels or to relatives tended to deteriorate in physical and mental health, and often there was a request for readmission. The numbers quoted in Table IV are too small to be of statistical significance, but the impression of the senior staff is that the residents needed the protective life of the hostel, and there will always be a low discharge rate, thus tending to create a waiting-list.

Conclusions

The present number of places required for this urban population of 157,990 is 10 male and 60 female. This is an

TABLE IV.—*Discharges*

	Males	Females	Total
Discharged to:			
Part III accommodation ..	—	2*	2
General hospital—geriatric unit ..	—	2†	2
" psychiatric unit ..	3‡	4	7
Relatives ..	2§	—	2
Died ..	1	3	4
Total ..	6	11	17

* Both awaiting readmission to Greenmount House.

† One died; one awaiting readmission to Greenmount House.

‡ One died within a week.

§ Both admitted from home to geriatric unit within a short period.

¹ Residential welfare accommodation set up under Part III of the National Assistance Act, 1948, for persons who, by reason of age, infirmity, or any other circumstances, are in need of care and attention.

estimate based on the present 50-bed hostel plus a waiting-list of 20, mainly females. The number on the waiting-list has not changed much during the two years under review. The need is likely to increase owing to the increase in the number of old folk and the change to community care, transferring the care of the chronic patient from hospital to hostel. It may be there are hidden cases in the community, but with the local publicity the hostel has received the number must be few.

A hostel for 50 persons is an efficient economical unit which can provide homely conditions if special care is taken in design, and is, we consider, preferable to two units of 20 and 30 places.

A high standard of staff accommodation is necessary in any mental hostel to attract the best staff, particularly those with mental-nursing qualifications.

The appointment of a general practitioner with mental hospital experience to take special interest in the residents is beneficial to the residents and is a support to the staff.

The local people from churches, schools, factories, and shops will befriend and help the elderly residents of a well-run hostel.

Few of the elderly mentally infirm can be discharged home. Improvement in the physical and mental health of residents was not maintained when they left the special care provided at the hostel.

Summary

A purpose-built hostel for 50 elderly mentally infirm people is described. A rough estimate of future needs is made. A relatively large hostel for 50 patients can be run in a homely manner, and is considered to be the most suitable size. A high standard of staff accommodation is essential for recruitment of well-qualified staff. The facilities provided in this well-run hostel have improved the physical and mental health of the elderly residents, but they deteriorate in health if they are discharged from the hostel.

We wish to thank Dr. A. I. Ross, Medical Officer of Health for Bolton C.B., for his advice in the preparation of this paper.

REFERENCES

- Eaton, M. T., and Wittson, C. L. (1962). *Geriatrics*, 17, 229.
 Leyberg, J. T. (1959). *Lancet*, 2, 282.
 McKellen, D. M. (1960). *Report on Population and Population Movement, County Borough of Bolton, Local report*.
 National Corporation for the Care of Old People (1963). *Accommodation for the Mentally Infirm Aged*, p. 19. London.
 Phillips, H. Temple (1966). *Med. Offr*, 115, 85.
 Royal Commission on the Law Relating to Mental Illness and Mental Deficiency. 1957. Cmd. 169. H.M.S.O., London.
 Tooth, G. C., and Brooke, E. M. (1961). *Lancet*, 1, 710.
 Wright, S. L. (1965). *Med. Offr*, 114, 264.

CONFERENCES AND MEETINGS

Paediatric Conference

[FROM A SPECIAL CORRESPONDENT]

A conference for consultants on paediatrics was held at the Royal College of Physicians in London on 7 and 8 October.

Dr. L. B. STRANG (University College Hospital, London) gave an account of the changes in the lung at birth, illustrated by studies in the foetal lamb, which was also subject to the respiratory distress syndrome and hyaline membrane disease. In the lamb it had been found that the pressure needed to inflate the lung at the first breath was much greater than that for subsequent breaths, when 20–30% of the air remained in the lung. In immature lungs there was a deficiency of the lipoprotein required to reduce the surface tension, and hence breaths after the first one used as much energy as the first one. Studies had shown that the fall in pulmonary vascular resistance needed to allow the increase in blood flow that was required at birth was inhibited or reversed by anoxia and hypercapnia, and that this could lead to the reopening of the ductus arteriosus and foramen ovale in the neonatal period. The alveoli of the foetus had been found to be fully dilated by a secreted fluid, with a total volume of about 100 ml. in the mature foetus. This was absorbed via the interstitial lymphatics in the first five to six hours. If such fluid was not completely removed it might contribute to the formation of a hyaline membrane.

Dr. J. A. DAVIS (Institute of Child Health, London) discussed the conditions associated with hypoglycaemia in the newborn. Hypoglycaemia occurred particularly in the baby that was underweight for its gestational age, because its reserves were low. Of the 6% of babies weighing less than 2,500 g. at birth 30% were underweight for gestational age, and in 20% of these the blood glucose con-

centration fell below 20 mg./100 ml. within the first 72 hours. Of this group with hypoglycaemia 20% developed symptoms, including apnoeic attacks, convulsions, pallor, or jittery movements. A large proportion of children developing symptoms developed brain damage—the cerebral lesions being histologically no different from those of hypoxia, though they were much more extensive. Maternal factors in neonatal hypoglycaemia included elderly primigravidae, heavy smokers, those under 60 in. (1.5 m.) in height, with previous underweight babies, or with severe toxæmia. Ideally the blood-glucose concentration should be estimated eight-hourly for the first 48 hours in the babies at risk. Early feeding probably helped to diminish the incidence of hypoglycaemia, and when symptoms occurred a 20% hexose solution with heparin and saline into a peripheral vein should be given.

Urinary Infections

Discussing urinary infections in childhood, Dr. J. M. SMELLIE (University College Hospital, London) said that once this had been proved bacteriologically, a micturating cystogram was as important an investigation as an intravenous pyelogram. No less than 40% of children with a normal pyelogram studied by her had been shown to have reflux. Dr. Smellie had found that eradication of the infection, usually by treatment with sulphonamides, and careful follow up had led to the disappearance of reflux in some cases, and scarring of the kidneys had been halted or prevented. Dr. W. BRUMFITT (Edgware General Hospital) emphasized that much of the expenditure involved in treating renal

failure could be saved by detecting and treating urinary infection. His sole criterion for urinary infection was a bacterial count of more than 100,000/ml. in a properly collected specimen. He had used antibody levels to assess renal infection, and he regarded a titre over 1:320 as evidence of this irrespective of the radiological findings. The cure rate was higher when the titre was low. White cells in the urine were, he said, a measure of inflammation, not infection. Moreover, proteinuria was frequently absent in cases of proved urinary infection.

Inborn Errors of Metabolism

Recent work on the metabolism of galactose and the disaccharidase deficiencies was presented by Dr. A. HOLZEL (St. Mary's Hospital, Manchester). The disaccharidases were situated in the brush border of the intestinal epithelial cells, and, though genetic variation could affect them, they were also affected by diseases of the bowel. Professor C. E. DENT (University College Hospital, London) showed how the metabolic pathways involving amino-acids could be affected by genetically determined enzyme defects. Urinary and plasma chromatograms had provided essential information in albinism, alkaptonuria, phenylketonuria, maple-syrup disease, and argininosuccinic aciduria. In particular, the degree of renal clearance was important in diagnosis, because a low clearance with low levels of the amino-acids in the urine might suggest that the disease was not present when in fact blood levels were high. Similar confusion could arise with defects of renal transporter enzymes, causing failure of reabsorption and high urinary levels. Professor Dent also