

NEW LONG STAY PATIENTS IN AN URBAN AND A RURAL HOSPITAL FOR PEOPLE WITH MENTAL HANDICAP: A COMPARATIVE STUDY

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Introduction

Over the past few years community based services for patients with mental illness and for patients with mental handicap are being developed in preference to institutional care and plans for community based services include eventual closure of long stay wards (Ford *et al.*, 1987). Ongoing plans to develop services in the community to manage people with mental handicap are being prepared to match the individual needs of the patients (Griffin, 1989).

Despite efforts to reduce the number of long stay patients in the mental illness hospitals some of the admissions are becoming long stay (Magnus, 1967; Mann and Cree, 1976; Wing, 1979; Bewley *et al.*, 1981; McCreadie *et al.*, 1983; Cumella *et al.*, 1988; Todd *et al.*, 1990;

O'Driscoll *et al.*, 1990). A similar trend has been observed in hospitals for the mentally handicapped (Spencer, 1976; Dickinson and Singh, 1991; Khan *et al.*, 1993) but as there have been several major changes in the management of people with mental handicap, further studies are required to describe the characteristics of the new long stay patient population in mental handicap hospitals. These studies could reveal the realistic difficulties involved in the community management of people with mental handicap. Some of these difficulties are the presence of severe behavioural disorders, physical illnesses, recurrent or chronic mental illnesses (Corbett, 1979; Lund, 1985; Gostason, 1985), lack of specific facilities in the community (Landesman-Dwyer,

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1981) or lack of family and social support. Many of these problems resemble the factors that contribute to the prolonged stay of the new long stay patients in the mental illness hospitals (Mann and Cree, 1976).

There has been a long held belief that people with mental handicaps are well integrated in rural areas, that a rural environment is less demanding and that behavioural problems are generally tolerated in the rural communities where as in the complex nature of an urban environment these people would be institutionalized at an early stage of their lives. Khan *et al.* (1993) found that the new long stay patients in an urban area were young, male and had severe behavioural problems with less dependency needs but with impaired communication.

One of the methods to study this aspect of community care is to look at the differences, if any, in the characteristics of new long stay patients admitted to an hospital with an urban catchment area and an hospital serving a rural catchment area. This study, which is an extension of the study of new long stay patients of Monyhull Hospital (Khan *et al.*, 1992), was undertaken to study the patient characteristics of people in Moneyhull Hospital (MH), a mental handicap hospital in the city of Birmingham and

Stallington Hospital (SH), a mental handicap hospital serving a predominantly rural catchment area located in Staffordshire. The aim of the study was two fold. To study the differences in the characteristics as mentioned above and to describe the characteristics of the new long stay population as a group.

Method

A "new long stay" (NLS) was defined as a period of continuous in-patient stay of more than 1 year and less than 5 years at the time of the survey. NLS patients at SH (n = 35) were identified during the month of March 1990. SH has a wide geographical catchment area which is spread out predominantly in the rural parts of North Staffordshire (population 460,000), north-eastern parts of Shropshire (above the cut off line coinciding with the trunk road A5), mid and south-eastern Staffordshire (TABLE I).

NLS patients at MH (n = 31) were studied during the month of April/May of 1990. MH admits people with a mental handicap from three adjacent health districts (South, Central and West Birmingham) of the city of Birmingham and the catchment area of the hospital has a total population of about 660,000 (TABLE I).

TABLE I

Hospital	population (approximate)	Hospital inpatients	New long stay patients		
			n	rate (1)	(%) (2)
Stallington	750,000	300	35	4.66	11.6%
Monyhull	660,000	290	31	4.67	10.6%

(1) Rate = number of NLS per 100,000
 (2) % = % of hospital population

Demographic details, family, medical and medication details were collected from the case notes using a questionnaire prepared by the authors. Reasons for admission and continued stay were recorded on a separate check list of reasons. The level of mental handicap and the psychiatric diagnosis were established in accordance with the criteria set out in the ninth revision of the International Classification of Diseases (W.H.O., 1978).

Details related to disabilities/skills and behavioural problems were collected using the Disability Assessment Schedule (DAS) (Holes *et al.*, 1982), a semi-structured interview schedule which records levels of disability, skills, communication, social interaction pattern and behavioural management problems. The schedule was rated after interviewing a key care staff, or a senior nurse of the ward who knew the person with mental handicap well.

D.A.S. items were analysed as summary and raw scores. Summary scores were calculated as suggested in Wing (1989) in their study of Darenth Park Hospital. Where additional information about differences was required raw scores were used to tabulate the results. Data was cross tabulated and where relevant a Chi-square test was applied.

Demographic Details

There were 35 new long stay patients in Stallington Hospital (SH) and 31 new long stay patients in Monyhull Hospital (MH) (TABLE I). Percentages of male and female patients in both

hospitals were the same. The distribution in the age range suggested a slightly older population in SH while 55% of MH patients were in the younger age range of 21-30 years (Figure 1). More than 85% of the patients in both hospitals belonged to the Caucasian, white ethnic group. All were unmarried. Only one patient was detained under the provisions of the Mental Health Act (MHA 1983) in MH.

One third of the patients in each group came from family homes. While 25.4% of patients in MH were from hostels, 31% in SH were admitted from other hospitals. More patients were admitted from supported accommodation in the community in MH group (44.6%) than in the SH group (28.3%). Duration of new long stay did not differ in the two groups.

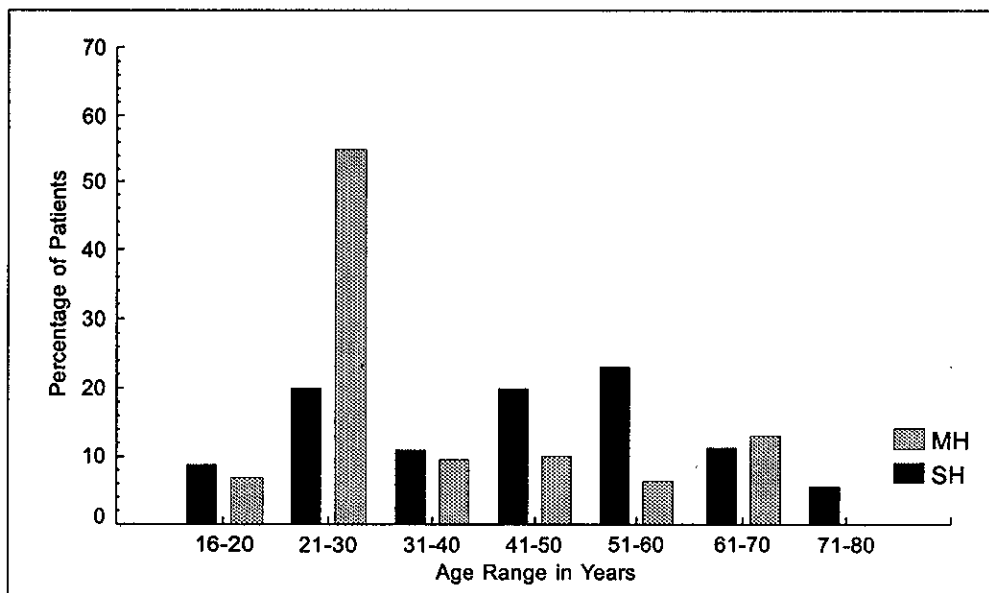
Contact with Family/Relatives

While the existence of a next of kin did not differ significantly in the two hospitals, 31% of the patients in SH did not have visits from or did not visit their next of kin. 37% in the SH group and 64% in the MH group had frequent visits from their relatives at least once a month.

Medical/Psychiatric Conditions

Conditions causing mental handicap were not known for most patients in both hospitals. 46% of the patients in the SH group had chronic medical conditions other than epilepsy. 29% of the SH and 22.4% of the MH patients had epilepsy. 90.9% of the SH patients and 80.2% of the

FIGURE 1
Stallington and Monyhull Hospitals - New Long Stay Patients, Comparative Study



MH patients were on some form of medication.

Disabilities/Skills

The distribution of degrees of functioning suggests that the SH group had more severely handicapped patients than the MH group who were predominantly mildly mentally handicapped. While there were no major differences in other areas of abilities/skills the scores showed that both groups had more people with better mobility (77%) and were able to feed themselves without any help. More than two thirds of the patients in the MH group were continent. Only 46% of the SH patients had good hearing but more than 80% in both hospitals had normal

vision. Both groups had poor academic skills and less than 50% had good domestic skills. Summary scores suggest no significant statistical differences between the two groups as shown in TABLE VI. Two thirds of the patients in the SH were socially impaired and had greater difficulties in speech pattern i.e. pronunciation.

Behavioural Problems

Group profiles of behavioural problems (raw scores) did not differ significantly between the two groups. Higher levels of aggressive behaviour, destructive, screaming and objectionable behaviours were found in both groups and these were reported at a level considered

TABLE II
Demographic Details

		STALLINGTON HOSPITAL		MONYHULL HOSPITAL		P-VALUE (Chi Sq. Test)
		N = 35	%	N = 31	%	
SEX:	MALE	25	71	22	71	1.0
	FEMALE	10	29	9	29	
AGE RANGE:	16 TO 20	3	8.6	2	6.5	0.075
	21 TO 30	7	20	17	55	
	31 TO 40	4	11	3	9.7	
	41 TO 50	7	20	3	9.7	
	51 TO 60	8	23	2	6.5	
	61 TO 70	4	11	4	13	
	71 TO 80	2	5.7	0	.	
ETHNIC GROUP:	1. WHITE, CAUCASIAN	34	97	27	87	0.234
	2. AFRO-CARIBBEAN	0	-	2	6.5	
	3. ASIAN	0	-	1	3.2	
	4. CHINESE	1	2.9	0	-	
	5. OTHER	0	-	1	3.2	
RESIDENCE BEFORE ADMISSION:	1. FAMILY HOME	13	37	10	32	0.454
	2. HOME-HA	3	8.6	1	3.2	
	3. HOME-SW	2	5.7	5	16	
	4. HOME/HOSTEL-LA	5	14	6	19	
	5. HOME/HOSTEL-VOLUNTARY	0	-	1	3.2	
	6. HOME/HOSTEL-PRIVATE	0	-	1	3.2	
	7. INDEPENDENT-FLAT/HOUSE	0	-	0	-	
	8. FLAT-LAND LADY +	0	-	0	-	
	9. OTHER HOSPITAL	11	31	5	16	
	10. PRISON/BORSTAL	0	0	1	3.2	
	11. OTHER	1	2.9	1	3.2	
DURATION OF STAY (YRS.):	1 YEAR	7	20	9	29	0.257
	2 YEARS	8	23	10	32	
	3 YEARS	12	34	4	13	
	4 YEARS	8	23	7	23	
	5 YEARS	0	-	1	3.2	

as severe management problems. Potentially unmanageable behaviours were more common in the MH group.

Reasons for Admission/ Continued Stay

There was a statistically significant difference in the pattern of reasons given

for admission in both hospitals. Patients were admitted for predominantly behavioural problems (81%) in MH, while behavioural (49%) and social (43%) reasons were common in the SH group. However, pattern of reasons for continued stay remained almost the same, especially for the patients in the SH group.

TABLE III
Demographic Details

	STALLINGTON HOSPITAL		MONYHULL HOSPITAL		P-VALUE (Chi Sq. Test)
	N = 35	%	N = 31	%	
CURRENT NEXT OF KIN:					
1. NOT KNOWN	6	17	1	3.2	0.227
2. PARENTS AND OR SIBLINGS	19	54	23	74	
3. SIBLINGS ONLY	8	23	6	19	
4. OTHERS	2	5.7	1	3.2	
VISITS FROM/TO NEXT OF KIN					
1. NONE	12	34	2	6.5	0.059
2. ONCE A WEEK	7	20	9	29	
3. ONCE A MONTH	6	17	11	35	
4. ONCE IN 3 MONTHS	2	5.7	0	0	
5. ONCE IN 6 MONTHS	4	11	4	13	
6. ONCE A YEAR	3	8.6	1	3.2	
7. ONCE IN 2 YEARS	1	2.9	3	9.7	
8. ONCE IN LAST 5 YEARS	0	-	1	3.2	

TABLE IV
Medical/Psychiatric Details

	STALLINGTON HOSPITAL		MONYHULL HOSPITAL		P-VALUE (Chi Sq. Test)
	N = 35	%	N = 31	%	
MEDICAL CONDITION CAUSING MENTAL HANDICAP, KNOWN	4	11	6	19	0.446
SIGNIFICANT MEDICAL HISTORY CHRONIC (other than epilepsy)	16	46	7	23	0.049
EPILEPSY	10	29	7	22.4	0.327 (DF = 4)
DEGREE OF MENTAL HANDICAP					
1. BORDERLINE (IQ = >70)	3	8.6	2	6.5	.0001
2. MILD (IQ = 50-70)	2	5.7	16	52	
3. MODERATE (IQ = <50-35)	2	5.7	5	16	
4. SEVERE (IQ = <35-20)	24	69	8	26	
5. PROFOUND (IQ = <20)	4	11	0	-	
MENTAL ILLNESS	4	11	9	29	
DF - Degree of Freedom					

TABLE V
Disabilities/Skills (Raw Scores)

	STALLINGTON HOSPITAL		MONYHULL HOSPITAL		Chi Sq. Test	
	N = 35	%	N = 31	%	df	p value
COMMUNICATION						
1. METHOD OF	16	46	20	65	3	0.223
2. UNDERSTANDING	8	23	16	52	4	0.103
3. USING	11	31	15	48	4	0.267
4. PRONUNCIATION	7	20	0	-	5	0.003

Note: item score for only the highest ability category are given in the table but all the categories are included in the Chi Sq. Test.

TABLE VI
Disabilities/Skills (Summary Scores)

	STALLINGTON HOSPITAL		MONYHULL HOSPITAL		Chi Sq. Test	
	N = 35	%	N = 31	%	df	p value
Mobile (able)	27	77	24	77	3	0.624
Self Help (able)	15	46	13	41.7	9	0.152
Vision, normal	30	86	26	84	1	0.771
Continent	16	46	22	71	11	0.495
Hearing, normal	35	100	29	94	1	0.420
Academic skills, none	17	49	10	32	13	0.123
Domestic work, independent	3	8.6	4	13	6	0.975
Repetitive activities, maximum	4	11	6	19	8	0.801
Abnormal speech	10	29	15	48	6	0.562
Symbolic activity	7	20	7	23	4	0.547
Social interaction, impaired	22	63	12	39	1	0.050

Note: Figures for categories other than highest are not given in the table but are included in the Chi Sq. test.

Discussion

Serious management difficulties can be identified by carers (Kiernan *et al.*, 1989) who can also assess moderate management difficulties which are mostly found in the area of social adaptation (Kiernan and Moss, 1990). However, it is possible that the instruments used in the collection of data were less sensitive to the degree of severity of behavioural problems especially in recording the intensity and duration of disruption

caused by people with mental handicaps in relation to the hospital settings studied. It was not possible to collect other details such as duration of stay in other places and certain problems before admission especially patterns of sexual behaviour.

There are no comparative studies which have looked at the differences in the characteristics of people with mental handicap and urban or rural backgrounds. A recent follow-up study of psychiatric morbidity in urban and rural

TABLE VII
Behavioural Problems (Raw Scores)

	STALLINGTON HOSPITAL		MONYHULL HOSPITAL		Chi Sq. Test	
	N = 35	%	N = 31	%	df	p value
1. Physically aggressive						
Severe problem	7	20	8	26	3	0.849
Potential	4	11	5	16		
2. Destructive						
Severe problem	6	17	8	26	3	0.288
Potential	2	5.7	1	3.2		
3. Overactive						
Severe problem	5	14	6	19	2	0.468
Potential	0	-	0	-		
4. Seeks attention						
Severe problem	4	11	7	23	3	0.323
Potential	0	-	1	3.2		
5. Self injury						
Severe problem	3	8.6	8	26	3	0.071
Potential	0	-	1	3.2		
6. Wanders						
Severe problem	3	8.6	5	16	3	0.387
Potential	3	8.6	5	16		
7. Screams						
Severe problem	6	17	6	19	3	0.473
Potential	0	-	2	6.5		
8. Temper tantrums						
Severe problem	5	14	10	32	3	0.107
Potential	0	-	2	6.5		
9. Disturbs at night						
Severe problem	2	5.7	5	16	3	0.280
Potential	1	2.9	0	-		
10. Objectionable behaviour						
Severe problem	5	14	5	16	3	0.764
Potential	1	2.9	2	6.5		
11. Throws objects						
Severe problem	2	5.7	2	6.5	3	0.741
Potential	0	-	1	3.2		
12. Anti-social						
Severe problem	3	8.6	3	10	3	0.237
Potential	2	5.7	1	3.3		
13. Sexual delinquency						
Severe problem	5	14	2	6.7	3	0.392
Potential	1	2.9	3	10		

NOTE: Figures for categories 'lesser management' and 'does not occur' are not given in the table but are included in the Chi Sq. test.

TABLE VIII
Reasons for Admission/Continued Stay

REASONS	ADMISSION REASONS				P-VALUE	REASONS FOR STAY				Chi Sq. p value
	Stallington Hospital		Monyhull Hospital			Stallington Hospital		Monyhull Hospital		
	N = 35	%	N = 31	%		N = 35	%	N = 31	%	
Mental illness	1	5.7	4	13	0.002	1	2.9	3	9.7	0.153
Medical	0	-	0	0		3	8.6	2	6.5	
Behavioural	17	49	25	81		16	46	20	65	
Social	15	43	2	6.5		15	43	6	19	

primary care highlighted the paucity of such studies in non-mental handicap populations (Seivewright *et al.*, 1991).

a) Rural and Urban Catchment Area: Differences

The percentage and rate of NLS patients in both the catchment areas did not differ suggesting a uniformity in the accumulation of NLS patients in both the hospitals (TABLE I). The low frequency of contact with relatives and next of kin seen in the SH group suggests the nature of realistic difficulties involved in maintaining long term contact with relatives in catchment areas that have large geographical distributions. Other reasons could be that the patients of the SH group were older and were placed in the hospital at a younger age. Possible rejection by the family at a younger age may have contributed, in part, to the low frequency of contact. A number of differences in the abilities/skills seen in the two groups can be explained by the differences in the levels of mental handicap alone. People with severe mental handicap have higher levels of chronic medical problems.

This study demonstrates a number of group differences between the rural and urban hospital groups. A spectrum of behaviours, at a level considered as management problem were reported in both groups even though the levels of mental handicap in both the groups were different. However, the MH group had more potential severe management problems and the possibility of such behaviours occurring in the community would make the process of resettlement difficult.

b) New Long Stay Patients as a Group

The government's white paper on community care (D.O.H., 1989) gave an added impetus to the development of care in the community and it is expected that further developments will continue to occur as the inpatient population of large mental handicap hospitals continues to fall. In spite of existing "community culture" and efforts to keep those in the community away from large mental handicap hospitals a few have been admitted either because of their own

special needs or because of lack of adequate funding or facilities in the community.

It is possible that current funding is either less or that large capital and or revenue costs are taken up entirely by those for whom such services can be easily developed. Establishing relevant services for the behaviourally disturbed, mentally ill or those with sensory handicaps has proven to be contentious or very expensive. New long stay patients demonstrate a phenomenon which can only be described as natural especially when services in the community have not been planned with due attention being paid to the difficulties inherent in the concept of community care.

The hospital care provisions suggested in "Better services" (D.H.S.S., 1971) was perhaps a correct assessment of the problems involved in setting up realistic services for this NLS group. Community based residential (group home type) services for very severely disturbed, mentally ill have not been shown to be successful in the USA (Landsman-Dwyer, 1981). Large hostels tend to become mini institutions in due course.

Lack of adequate services in the hospital, for those who have special needs will only prolong their stay. Any initiation of improvements in the quality of either the care or the establishment of specialized services in the hospital, for example services to increase the communicative competence of patients who have such deficits (Fraser and Rao, 1991), would be considered a "creeping development" of the institution. In the

past these institutions were underfunded because of rapid advances in other specialities of health care and the current plausible excuse of community care should not form another reason for underfunding the existing hospitals that serve the needs of people with special medical and nursing needs. The needs of these new long stay patients should not be forgotten.

The needs of these NLS patients reflect the current problems in community care and resettlement process. Studies that have compared hospital and community settings have not been conclusive. A comparative study (Locker *et al.*, 1984) which evaluated care in hospital, hostel and home settings concluded that the environment provided in community based small hostels did not offer any greater advantage than that offered in a hospital setting. Another study (Fleming and Krose, 1990) however found significant improvements in patients' behaviours in limited areas of skill in community residential facilities. A 12 month follow-up study (Booth and Phillips, 1991) which looked into the effect of independent living schemes in the community did not find any unusual difficulties in the pattern of coping skills of carers who looked after people resettled from a variety of settings into the community and also found that people with mental handicap do resettle well contrary to the views expressed at that time.

Two large scale studies conducted in England and Wales respectively drew widely differing conclusions. Rawlings (1985) concluded that for certain groups

of patients a small home in a residential area did not offer any greater advantage than placement in another geographical location. However, Hemming *et al.* (1981) who employed a before and after discharge design using residents as their own control found significant overall benefits in most areas on long term placement in the community. In the extended follow-up study of the same patients (Hemming, 1986) the findings were mixed but rebellious and untrustworthy behaviours, as defined in Nihira *et al.* (1974), along with whether or not the resident was on anti-psychotic medication before discharge from the hospital emerged as best predictors of return to hospital. It was also suggested that the level of staff morale and the nature of the decision making process were the crucial factors in the process of readmitting the resident to the hospital.

Conclusions

This study confirms the observations that people, who are resettled first have, as a group, higher levels of skills. Less able and difficult to manage people resemble in many ways those who are in the hospitals as "long stay" patients (Jawed *et al.*, 1992; Farmer, *et al.*, 1990). Long term follow-up studies are required, to delineate factors that will help people with behavioural problems in the community to avoid admittance to hospital and to prepare them for resettlement.

Some time ago a group of senior consultants suggested in an 8 year follow-up study (Browne *et al.*, 1979) of patients of four mental handicap

hospitals a "waiting list for community resettlement". Whilst at hospital, due consideration must be given to their special needs (Hughes *et al.*, 1991) and their quality of life there (Walker and Naylor, 1990). In addition to this, a register of NLS patients of each mental handicap hospital in the region could be maintained. An annual "league table" of NLS patients in each hospital by their districts of origin would focus attention of planners to differences in the levels of service provisions in community care. It would also emphasize the role provided by the hospitals in providing relevant specialist care. It is suggested that a regional panel, consisting of members from various professional groups be set up to review the needs of these new long stay patients on an annual basis, with a view to assessing and maintaining adequate resources required for managing these patients in the hospital during their stay and for setting up relevant and adequate services in the community.

Summary

Characteristics of new long stay patients, with a duration of inpatient stay of more than one year and less than five years, admitted to two mental handicap hospitals with differing catchment areas (urban and rural) in the West Midlands health region in the UK were studied. Those from urban areas were younger, mildly mentally handicapped people, were more likely to be admitted from supported accommodations in the community, and had less dependency needs but exhibited more behaviour problems.

The rural group were older, more severely mentally handicapped people with higher levels of dependency, significantly more socially impaired, had less contact with relatives and had more medical problems. The main reason for admission in the urban group was behavioural problems while social reasons were prominent in the rural group. However, reasons for continued stay were predominantly the same in both groups. It is suggested that a district panel, consisting of members from professional and consumer groups be set up to review the needs of these new long stay patients on an annual basis, with a view to assessing and maintaining adequate resources required for management of these patients in the hospital during their stay and for setting up relevant and adequate services in the community after their discharge from the hospital.

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