

AN INVESTIGATION OF THE MEDICAL AND SOCIAL NEEDS OF PATIENTS IN MENTAL HOSPITALS

I. CLASSIFICATION OF PATIENTS ACCORDING TO THE TYPE OF INSTITUTION REQUIRED FOR THEIR CARE

BY

F. N. GARRATT, C. R. LOWE, AND THOMAS MCKEOWN

From the Department of Social Medicine, University of Birmingham

It is well recognized that almost without exception existing mental hospitals are unsatisfactory in size, design, and possibly also in site, but it is by no means obvious what type of hospitals should replace them. Are they to be large institutions equipped to deal with mental patients of all classes, or small specialized units catering for restricted groups? Should they be relatively isolated, as in the past, or associated closely with the general hospital system? To what extent should the functions of the mental hospitals be taken over by the general hospitals? Some kind of answer must be given to these and related questions if institutional care for the mentally sick is to be planned intelligently.

A recent Report of the Ministry of Health (1956a) discusses the future planning of hospital services for the mentally sick, and suggests that it is necessary to "review certain fundamental considerations on which past planning of mental hospitals has been based". The Report recognizes the varying requirements of the present population of mental hospitals, and the desirability of reconsidering the nature and site of the accommodation. This cannot be done, however, without much fuller information than is yet available about the population now in mental institutions. What is required is a classification of patients according to their medical, nursing, and social needs, with, where it is relevant, an assessment of domestic circumstances. With this knowledge it should be possible to suggest the type, size, and possibly also the site of the accommodation which should be provided. The purpose of the present inquiry was to obtain the requisite data by an assessment of a sufficiently large and representative group of patients in mental hospitals. It follows two other investigations based on patients in the Birmingham area: the first examined some of the

problems of providing care and treatment for the mental hospital population of the Birmingham region (Cross, 1954); the second considered in detail the circumstances of long-stay patients in one hospital (Cross, Harrington, and Mayer-Gross, 1957).

METHODS

It was considered that the inquiry might be concerned with mental patients (*a*) in the Midland Region, or (*b*) in the City of Birmingham, or (*c*) in a single hospital. The first possibility could have been attempted only by the use of some sampling procedure which would have been complicated and would have created administrative difficulties; and the last would have been open to criticism on the grounds of the possible unrepresentativeness of any one hospital. It was therefore thought preferable to try to include all mentally sick persons in hospital* who were Birmingham residents. Since nearly all Birmingham mental patients go to Birmingham hospitals it would be unnecessary to visit institutions outside the city. And at institutions within the City it would be relatively easy to exclude non-residents. The City population had the further advantage that it could be related (for example in respect of sex and age distribution) to the total Birmingham population, for which information was available from the Census.

Table I (overleaf) gives the distribution between the four Birmingham mental hospitals (*a*) of all patients (4,278), and (*b*) of those patients (3,555) who were Birmingham residents. A further small number of mentally-ill patients (seventeen at the time of the survey) were in the Teaching Hospitals which

* Patients in mental deficiency institutions are excluded.

operate a large out-patient department for treatment of mental illness. These were non-statutory patients, however, and it was thought preferable to exclude them from the analysis of the mental hospital population, which otherwise consists wholly of patients retained under the Lunacy and Mental Treatment Acts.

TABLE I
NUMBERS OF BIRMINGHAM PATIENTS IN MENTAL HOSPITALS, JANUARY TO MARCH, 1957.

Hospital	Total Number of Patients	Number of Birmingham Residents		
		Males	Females	Total
A	1,352	462	738	1,200
B	1,222	354	592	946
C	952	314	579	893
D	752	229	287	516
Total	4,278	1,359	2,196	3,555

At the outset it was clear that most of the data required were not contained in any existing documents which hospitals keep for medical or administrative purposes. Nor was it considered practical to modify hospital records so that the information could be returned with the routine statistics. What was evidently needed was an *ad hoc* inquiry, designed for a specific purpose and conducted for a limited period.

It was thought necessary to put the main burden of this inquiry on a research staff provided from the university, rather than on the medical staff of the hospitals. There were two obvious objections to the employment of the hospital staff. In the first place the labour involved was very considerable and it seemed unlikely that the regular staff would have been able to undertake it. Secondly, the satisfactory completion of the records required a greater knowledge of the object and methods of the investigation than it seemed reasonable to expect of a large number of hospital doctors. At the same time it was obvious that the data could not be obtained without the assistance of someone who had intimate knowledge of the patients. The records were therefore completed by three full-time doctors from the university advised by the psychiatrist in charge of each case.

In the period January 1–March 31, 1957, a record card was completed for each of the 3,555 Birmingham mental patients. The cards were so designed that the data could be transferred readily to punch cards if necessary, although they were not in fact transferred and the original records were sorted by hand. Two considerations influenced this decision:

mechanical equipment was not available within the university department, although it could have been used without serious inconvenience elsewhere; and, more important, the material was such that there were obvious advantages in hand sorting. The number of records to be handled was admittedly rather high for this purpose, perhaps near the limit above which it would have been impractical to sort by hand.

Perhaps the chief point of interest in the design of the card is that after the entry of material required for all patients (name, address, sex, age, duration of stay, diagnosis, mobility, continence, etc.), each individual was assigned to one of three classes according to the facilities required for his care.

Full Hospital Facilities.—Patients who required hospital investigation or treatment (x-rays; laboratory examinations; surgery; skilled nursing, etc.) for mental or physical illness.

Limited Hospital Facilities.—Patients who did not require hospital investigation or treatment, but needed basic nursing for mental or physical illness, or supervision because of their mental state.

No Hospital Facilities.—Patients who did not require nursing or mental supervision and needed only accommodation and occupational facilities.

This classification was suggested by earlier experience of an investigation of the chronic sick in hospital (Lowe and McKeown, 1949) and by a preliminary inspection of fifty patients in two wards of one of the mental hospitals. With the help of the psychiatrist in charge it was found possible at an early stage in the completion of the document to place a patient in one of the three classes. This classification had the great advantage that, once it had been made, a different card could be completed in respect of each class. The questions which are of interest are quite different according to the type of patient: contrast, for example, the information required about a mental patient with acute physical illness needing hospital treatment, with that needed for one who could be discharged if he had a suitable home, and who requires only hostel accommodation and suitable employment. To record such widely different types of information on a common document is wasteful of space and labour, and, what is more serious, extremely confusing. An early classification made it possible to relate questions much more closely to the circumstances of the individual under consideration.

TABLE II
DISTRIBUTION OF PATIENTS IN MENTAL HOSPITALS ACCORDING TO AGE

Age (yrs)	16-24		25-34		35-44		45-54		55-64		65-74		75 and Over		All Ages		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Birmingham Survey	Males	30	2.2	154	11.3	246	18.1	301	22.1	289	21.3	211	15.5	128	9.4	1,359	100
	Females	31	1.4	122	5.6	252	11.5	365	16.6	432	19.7	484	22.0	510	23.2	2,196	100
	All Patients	61	1.7	276	7.8	498	14.0	666	18.7	721	20.3	695	19.6	638	17.9	3,555	100
All Patients in Mental Hospitals of E. and W., 1954*		3,426	2.3	14,748	10.0	21,721	14.7	30,709	20.8	31,738	21.5	28,054	19.0	17,333	11.7	147,729	100

* Royal Commission on the Law Relating to Mental Illness, etc. (1957).

REPRESENTATIVENESS OF THE BIRMINGHAM MENTAL HOSPITAL POPULATION

Although there is considerable variation in the composition of the populations of individual hospitals, it seemed probable that the 3,555 Birmingham patients, drawn from a general population of over one million, would be reasonably representative of the mental hospital population of England and Wales (145,457 in 1955*), of which they represented approximately one in forty (2.4 per cent.). We have compared the Birmingham and the national mental hospital populations in respect of (a) age distribution, (b) status under the Lunacy and Mental Treatment Acts, (c) duration of stay, and (d) degree of overcrowding. The only notable differences between the two populations are:

- (a) Mental hospital patients were a little older in Birmingham than in the country as a whole (Table II).
- (b) In Birmingham the proportion of voluntary patients was slightly higher, and the proportion of certified patients correspondingly lower (Table III). For the purpose of this comparison we have excluded non-statutory patients.

TABLE III
STATUS OF PATIENTS IN MENTAL HOSPITALS*

Status	Birmingham Survey		England and Wales, 1955†	
	No.	%	No.	%
Voluntary ..	1,082	31.2	38,047	26.2
Temporary ..	—	—	464	0.3
Certified	2,386	68.8	106,946	73.5
Total	3,468	100	145,457	100

* Non-statutory patients and patients detained under sections 20 and 21 of the Lunacy and Mental Treatment Acts are excluded.
† Ministry of Health (1956b).

* Health Service patients only.

- (c) A slightly higher proportion of Birmingham patients had been in hospital for less than a year (Table IV).

TABLE IV
DISTRIBUTION OF PATIENTS IN MENTAL HOSPITALS ACCORDING TO DURATION OF STAY

Duration of Stay (yrs) ..	Less than 1	1-4	5-9	10-19	20-29	30 and Over	Total
Birmingham Survey ..	20	20	15	22	15	8	100
England and Wales, 1954*	17	22	15	22	14	10	100

* Royal Commission on the Law Relating to Mental Illness, etc. (1957).

- (d) The degree of overcrowding was a little lower in Birmingham (14.1 per cent.) than in the country as a whole (14.8 per cent.), a difference most marked among male patients (7.9 per cent. and 10.8 per cent. for the two hospital populations respectively).

All these differences are relatively small, and are probably accounted for chiefly by the fact that the period of the survey (1957) is about 2 years later than that for which the most recent national data are available. During this time the trend in mental hospitals has been towards increasing age of patients, and voluntary rather than certified admissions. It seems permissible therefore to regard the Birmingham mental hospital population as being reasonably representative of that of England and Wales.

RESULTS

It was stated above that the primary object of this inquiry was to obtain information about the care required by each patient, and to use this information to classify mental hospital patients according to the

kind of institutional facilities which should be provided. The types of service considered to be most important for this purpose were medical treatment, nursing care, supervision, and occupation; the assessment of the needs of each patient for these services was made by the psychiatrist responsible for his care, and it should be emphasized that it was based on the service which was thought to be desirable rather than on that actually being given at the time of the survey.

MEDICAL TREATMENT

The percentage distribution of patients according to diagnosis is given in Table V; for this purpose we have used the classification suggested in the 1948 International Statistical Classification.

TABLE V
DIAGNOSIS

Diagnosis*	Males		Females		All Patients	
	No.	%	No.	%	No.	%
Schizophrenia (300)	685	50.4	765	34.8	1,450	40.8
Manic Depressive Reaction (301) ..	103	7.6	200	9.1	303	8.5
Involuntional Melancholia (302)	24	1.8	128	5.8	152	4.3
Paranoid State (303)	102	7.5	238	10.8	340	9.6
Senile Psychosis (304)	82	6.0	394	17.9	476	13.4
Other Psychoses (305-09)	88	6.5	131	6.0	219	6.2
Psychoneuroses (310-18)	24	1.8	45	2.0	69	1.9
Disorders of Character and Behaviour (320-24; 326) ..	39	2.9	35	1.6	74	2.1
Mental Defect (325)	76	5.6	126	5.7	202	5.7
Syphilis (025) ..	27	2.0	24	1.1	51	1.4
Epilepsy (353) ..	58	4.3	76	3.5	134	3.8
Other Disorders ..	51	3.8	34	1.5	85	2.4
Total	1,359	100	2,196	100	3,555	100

* Numbers in brackets are the list numbers used in the 1948 International Statistical Classification.

The assessment of medical treatment needed (Table VI) was not based on a theoretical consideration of the demands of different types of illness, but upon a separate appraisal of each patient's needs. The treatment which patients were actually receiving was also noted, and not surprisingly was usually identical with that considered to be desirable. Approximately 13 per cent. of patients required investigation or active medical treatment (E.C.T., intensive administration of tranquillizers, insulin, etc.), and 42 per

cent. needed maintenance treatment (regular administration of tranquillizers, anti-convulsant drugs for epilepsy, etc.). The other 45 per cent. were considered to require no medical treatment whatsoever; they made no demands on the hospital laboratory or therapeutic services and did not require a regular visit from a doctor.

TABLE VI
MEDICAL TREATMENT REQUIRED

Medical Treatment Required	Active		Maintenance		None		Total	
	No.	%	No.	%	No.	%	No.	%
Males ..	239	17.6	433	31.9	687	50.5	1,359	100
Females ..	220	10.0	1,072	48.8	904	41.2	2,196	100
All Patients	459	12.9	1,505	42.3	1,591	44.8	3,555	100

It should perhaps be noted that psychiatrists did not always agree about the best treatment of a specific illness, and this was reflected in differences between individual hospitals. These differences of opinion were chiefly in respect of the type of active or maintenance treatment, and did not affect the broad classification shown in Table VI, which did not vary appreciably from one hospital to another.

NURSING CARE

In assessing nursing care we have made a broad distinction between skilled and basic nursing. Under skilled nursing is included both general and mental nursing for which a considerable degree of training and experience is required: for example, assistance with investigation, assessment or active treatment, and the care of acutely-ill patients. Under basic nursing is included personal services—washing, dressing, feeding, lifting, attention to bladder and bowel of the incontinent—which do not require the degree of skill or experience referred to above. This distinction between skilled (or technical) and basic nursing was used in the study of the work of nurses published by the Nuffield Provincial Hospitals Trust (1953), and is essentially the same as that employed in an investigation of the needs of the chronic sick (Lowe and McKeown, 1949). We have not included under nursing care the supervision which some patients needed because of their mental state; this is of course the feature which specially distinguishes the care of mental illness from that of physical illness, and it seemed better to assess it separately in the discussion of "supervision" than to confuse it with the requirements for traditional nursing services.

In addition to the requirement of treatment, the two features which have most influence on demands for nursing care are mobility and continence (Tables VII and VIII respectively). More than four-fifths were fully ambulant, and only about one-twelfth were confined to bed. Approximately one in seven were partly or wholly incontinent.

TABLE VII
MOBILITY

Mobility	Bedfast		Sitting Out of Bed		Partly Ambulant		Fully Ambulant		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Males ..	76	5.6	48	3.5	69	5.1	1,166	85.8	1,359	100
Females	213	9.7	84	3.8	96	4.4	1,803	82.1	2,196	100
All Patients ..	289	8.1	132	3.7	165	4.6	2,969	83.5	3,555	100

TABLE VIII
CONTINENCE

Continence ..	Incontinent				Continent		Total	
	Wholly		Partly		No.	%	No.	%
	No.	%	No.	%				
Males ..	103	7.6	40	2.9	1,216	89.5	1,359	100
Females ..	325	14.8	39	1.8	1,832	83.4	2,196	100
All Patients ..	428	12.0	79	2.2	3,048	85.7	3,555	100

Table IX gives an analysis of nursing demands. 12.9 per cent. of the patients were considered to require skilled nursing, but—and this distinguishes them from patients in general hospitals who need skilled nursing—as a rule they did not require basic nursing as well. Most of them are patients admitted for investigation and treatment and on this account they require skilled nursing. They are not usually confined to bed, and hence make few demands for the personal services referred to above as basic nursing.

TABLE IX
NURSING CARE REQUIRED

Nursing Required ..	Skilled				Basic Only		None				Total	
	Only		With Basic Nursing		No.	%	With Supervision		Without Supervision		No.	%
	No.	%	No.	%			No.	%	No.	%		
Males	185	13.6	54	4.0	260	19.1	684	50.3	176	13.0	1,359	100
Females	157	7.1	63	2.9	564	25.7	1,147	52.2	265	12.1	2,196	100
All Patients	342	9.6	117	3.3	824	23.2	1,831	51.5	441	12.4	3,555	100

23.2 per cent. of the patients needed basic nursing only, and the remainder (63.9 per cent.) made no demands on the nursing services. In Table IX the last group of patients is subdivided according to whether they needed supervision (51.5 per cent. of all patients) or not. That is to say that, of the whole population of 3,555 patients, there were 441 (12.4 per cent.) with no requirements for personal services.

SUPERVISION

As stated above it is the need for supervision which distinguishes the care of the mentally sick from that of the rest of the hospital population. For the purposes of assessment the degrees of supervision were defined as follows:

Close Supervision.—Personal supervision of severely disturbed patients. Most patients requiring this degree of supervision were either aggressive (occasionally homicidal) or suicidal.

Limited Supervision.—Supervision of patients who, although they did not require close supervision, could not be allowed full freedom within the hospital community. Most patients in this group were suffering from the milder forms of disturbed behaviour which made it desirable to keep them in a sheltered environment.

Open Supervision.—Confinement to the mental hospital with complete freedom of movement within it. Patients so classified were considered to be capable of looking after themselves within the restricted environment of the hospital, although they were not suitable to be released in the general community.

No Supervision.—Patients were said to require no supervision if in the opinion of the psychiatrist they were capable of living outside the hospital, either in a hostel or at home.

In practice, patients in the first and last of these four classes (close supervision and no supervision)

were easily identified. The remainder were not so readily divided according to whether they needed limited or open supervision. The distinction was influenced to some extent by the design of the buildings within a given hospital, by the choice of treatment, particularly the frequency of use of tranquillizers, and by the readiness of the medical and nursing staffs to re-examine traditional views about the supervision required by the mentally ill. These influences no doubt largely explain the variations in the estimates of supervision required in different hospitals (Table X).

The data for all four hospitals are brought together in Table XI. Of the whole population of the mental hospitals, only 1·2 per cent. needed close supervision; most of these patients were receiving intensive treatment, usually convulsive therapy or massive doses of tranquillizers. About two-fifths (42·6 per cent.) required limited supervision, and the rest were either free within the hospital community (41·9 per cent.) or needed no supervision at all (14·3 per cent.).

OCCUPATION

Because of the prolonged period which mentally-ill patients have to spend in hospital, as well as the contribution it may make to their recovery, occupation is a more significant feature of the care of mental than of physical illness. In some respects it is the most difficult requirement to assess, but we

have attempted to classify the type of work which patients could, and usually for their own welfare should do, as follows:

Productive Work.—Any work which would have to be done whether or not patients were available for it. The productive work which the patients did was almost entirely in the wards, kitchens, canteen, sewing room, or laundry, or in the gardens or hospital farms; only ten were employed in productive work outside the hospital community and it seemed somewhat theoretical to attempt to assess the proportion who could have been so employed. The distinguishing feature of productive work as defined above is that it makes a worthwhile contribution to the community, and is not merely an exercise undertaken on behalf of the patient.

Occupational Therapy.—This term scarcely needs definition; it refers to the usual creative, but essentially unproductive work, introduced in order to occupy the patient and arouse his interest. It was usually done in specially equipped rooms, but occasionally, in the case of patients restricted to the ward or confined to bed, in the wards.

Light Work in Ward.—This includes small tasks, such as dusting and polishing, given in an attempt to interest the patient, which make little or no contribution to the work of the wards. In general, the patients so occupied were not considered suitable or ready to benefit from occupational therapy.

TABLE X
VARIATION IN ASSESSMENT OF SUPERVISION REQUIRED

Supervision Required	Close		Limited		Open		None		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital A	22	1·8	265	22·1	731	60·9	182	15·2	1,200	100
Hospital B	15	1·6	579	61·2	137	14·5	215	22·7	946	100
Hospital C	5	0·6	493	55·2	331	37·0	64	7·2	893	100
Hospital D	2	0·4	176	34·1	291	56·4	47	9·1	516	100
All Hospitals ..	44	1·2	1,513	42·6	1,490	41·9	508	14·3	3,555	100

TABLE XI
SUPERVISION REQUIRED

Supervision Required	Close		Limited		Open		None		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Males	13	1·0	546	40·2	600	44·1	200	14·7	1,359	100
Females	31	1·4	967	44·0	890	40·5	308	14·0	2,196	100
All Patients ..	44	1·2	1,513	42·6	1,490	41·9	508	14·3	3,555	100

TABLE XII
OCCUPATION REQUIRED

Occupation Required	None		Light Work in Ward		Occupational Therapy		Productive Work		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Males	407	29·9	195	14·3	361	26·6	396	29·1	1,359	100
Females	741	33·7	170	7·7	787	35·8	498	22·7	2,196	100
All Patients ..	1,148	32·3	365	10·3	1,148	32·3	894	25·1	3,555	100

Table XII shows the distribution of patients according to the occupation needed. Approximately one-third (32·3 per cent.) were considered to be incapable of any work, either because they were acutely ill, or because of their mental state. The proportions fit for light work in the wards or for occupational therapy were one-tenth and one-third respectively. The remaining one-quarter of the patients were able to do productive work. It should be emphasized that, in many cases, patients were not doing the work which was considered suitable. Most of those ready for productive employment were so engaged, but the proportion having occupational therapy (20 per cent.) was much below the estimate (32·3 per cent.) of those who might be expected to benefit from it. This difference reflects, of course, the limited resources of the hospitals. Many of these patients who were ready for but were not receiving occupational therapy were doing light work in the wards, but some of them were wholly unemployed.

CLASSIFICATION OF PATIENTS ACCORDING TO HOSPITAL FACILITIES REQUIRED

Psychiatrists were asked to classify patients according to whether their care required full hospital facilities, limited hospital facilities, or no hospital facilities. The nature of the needs which were considered to justify assigning a patient to each class was given in the discussion of "methods". Broadly what was attempted was to separate patients needing the full resources of a modern hospital from those who needed only basic nursing or supervision and from those who did not need hospital care. Although this assessment was first made at an early stage of the completion of the form for each patient—in order to facilitate the recording of different information for each class—the classification was not finally accepted until after completion of the whole document. In a few cases it was necessary, with the psychiatrist's agreement, to re-classify a patient, but in general, particularly when they were familiar with the objects and

methods of the inquiry, their original judgement of the appropriate class proved acceptable.

Table XIII gives the results of the assessment. 12·9 per cent. of the patients were considered to require full hospital care, and the proportion is considerably higher for males than for females. About three-quarters (74·7 per cent.) needed limited hospital facilities, that is the simple nursing or personal supervision referred to above. The remainder (12·4 per cent.) were thought not to require any of the services traditionally associated with hospitals, and many of them could have been discharged if they had had a suitable home.

TABLE XIII
CLASSIFICATION OF PATIENTS ACCORDING TO HOSPITAL FACILITIES REQUIRED

Hospital Facilities Required ..	Full		Limited		None		Total	
	No.	%	No.	%	No.	%	No.	%
Males	239	17·6	944	69·5	176	13·0	1,359	100
Females	220	10·0	1,711	77·9	265	12·1	2,196	100
All Patients ..	459	12·9	2,655	74·7	441	12·4	3,555	100

DISCUSSION

This communication is the first of a series which will present the results of an investigation of all Birmingham patients in mental hospitals. The purpose of the investigation was to assess the needs of patients, with a view to providing information which might assist in planning the future mental hospital services. The first report examines the care required, and the data are used to classify patients into three groups according to whether they needed full hospital facilities, limited hospital facilities, or no hospital facilities. The subsequent reports will consider the patients assigned to each of these groups.

The features of care which were considered to be most important from the point of view of the facilities required were medical treatment, nursing, supervision, and occupation, and the results are presented in Tables VI, IX, XI, and XII respectively. In the case of the first three items almost all patients

were already having the care they were thought to need; this is scarcely surprising, since psychiatrists are unlikely to permit any serious deficiency of the medical or nursing care or supervision of their patients. There were, nevertheless, considerable differences of opinion between psychiatrists, reflected in the results for the four Birmingham mental hospitals, both about the treatment of choice for a specific form of mental illness, and about the amount of supervision which patients required. This again is not unexpected, since views about treatment and supervision are changing fairly rapidly at the present time. It is in respect of occupation, however, that there was the most obvious difference between what the patients were doing and what it was thought they should be doing. This difference was evident from the considerable number of patients who might have benefited from occupational therapy, although they were doing only light work in the wards or no work at all.

In a later report we shall discuss more fully the possible significance of the results of assessment of patients' needs in relation to the future planning of mental hospitals. Here we are concerned only with the separation of patients into three broad classes according to their need for full, limited, or no hospital facilities (Table XIII). For the purposes of planning this seems to us the most fundamental division. Whatever their site, probably no one would question that the buildings and facilities appropriate to the needs of each of these groups are entirely different. Patients in the first class require the full resources of a modern hospital, and because they are under intensive investigation or treatment their occupation in most cases is a secondary consideration. Patients in the second class also need services—simple nursing and supervision—traditionally associated with hospitals, but because they do not require intensive investigation, treatment, or skilled nursing they can be catered for without loss of efficiency and much more economically if housed in a separate and altogether simpler unit. Because the great majority of these patients are ambulant, the design of such a unit should be quite different from that of one intended for the chronic sick, who also do not need full hospital facilities but, being confined to bed, need a much higher ratio of ward to day-room and other facilities. Mental patients in this class are also distinguished from those in the first class by the greater significance of their occupation. For patients in the third class, the facilities needed are not those traditionally associated with hospitals; they require only to be in a hostel or home where they can be given adequate opportunities for productive work.

It should of course be said that there can be nothing final about the classification which we have proposed. Inevitably the needs of patients reflect in a considerable degree the care which they have received in the past, and there are at least two grounds for expecting both that the incidence of admissions to mental hospitals will fall, and that the relative proportions of institutional patients requiring full, limited, or no hospital care may change. The first reason for optimism is that it seems probable that improved out-patient and home care can considerably relieve the burden on hospitals. It is reported that in Amsterdam the number of hospital admissions has been considerably reduced by careful assessment of patients seeking admission, and by relatively simple social adjustments at home (Querido, 1956). The results should be even better when home medical services for mental illness are linked with the social services as at Nottingham (Macmillan, 1956) and at Oldham (Ministry of Health, 1956a). The second reason for expecting some improvement is that medical treatment is becoming available for some forms of mental illness which formerly were untreated.

These considerations do not affect the usefulness of a classification of patients according to their needs. They merely stress the fact that any classification must be tentative, and the desirability of planning mental hospitals in the light of the most up-to-date information which can be obtained. Facilities based upon an assessment of requirements in the mid-20th century are less likely to become redundant, and will be more readily adapted to other purposes when they do, than facilities designed according to an earlier and outmoded conception of the mental hospital.

SUMMARY

(1) During the period January 1–March 31, 1957, the care required by each of the 3,555 Birmingham residents in mental hospitals was assessed by the psychiatrists responsible for their treatment.

(2) Approximately 13 per cent. of the patients required investigation or active medical treatment, 42 per cent. needed maintenance treatment, and 45 per cent. were considered to require no medical treatment (Table VI).

(3) Skilled nursing was needed by 13 per cent. of the patients and basic nursing (washing, feeding, lifting, dressing etc.) by 23 per cent. The remaining 64 per cent. made no demands on the nursing services (Table IX). These relatively low demands were largely determined by the high proportion of

patients who were fully ambulant (four-fifths) and the relatively low proportion who were incontinent (one-seventh).

(4) Only 1 per cent. of the patients needed close personal supervision because of their mental state (Table XI). Approximately 43 per cent. required limited supervision (in the wards) and the remainder were either free within the hospital community (42 per cent.) or needed no supervision at all (14 per cent.).

(5) About one-third of the patients were considered to be incapable of any work, either because they were acutely ill or because of their mental state (Table XII). The proportions fit for light work in the wards or for occupational therapy were one-tenth and one-third respectively. The remaining quarter of the patients were able to do productive work.

(6) The data were used to classify patients according to the type of facilities required for their care (Table XIII); 13 per cent. were considered to need the full resources of a hospital and 75 per cent. to need limited hospital facilities (essentially simple nursing or personal supervision). The remaining 12 per cent. were thought not to require any of the

services traditionally associated with hospitals and many of them could have been discharged if they had had a suitable home.

We are indebted to the Medical Superintendents (Drs. J. J. O'Reilly, I. A. Macdonald, C. E. Roachsmith, and C. M. Ross) and staffs of the four Birmingham mental hospitals for their full co-operation in assessing the needs of their patients, and to the Birmingham Regional Hospital Board for a generous contribution towards the expenses of this inquiry. We are also grateful to Drs. F. C. Edwards and R. H. Cawley for helping to complete the record cards.

REFERENCES

- Cross, K. W. (1954). *British Journal of Preventive and Social Medicine*, 8, 29.
- , Harrington, J. A., and Mayer-Gross, W. (1957). *J. ment. Sci.*, 103, 146.
- Lowe, C. R., and McKeown, T. (1949). *British Journal of Preventive and Social Medicine*, 3, 110.
- Macmillan, D. (1956). *Lancet*, 2, 1094.
- Ministry of Health. (1956a). Report of the Ministry of Health for the year ended 31 December, 1955, Part II. H.M.S.O., London.
- (1956b). *Ibid.*, Part I.
- Nuffield Provincial Hospitals Trust. (1953). "The Work of Nurses in Hospital Wards". London.
- Querido, A. (1956). In "The Elements of a Community Mental Health Program": Papers presented at the 1955 Annual Conference of the Milbank Memorial Fund, vol. 1, pp. 158-181. New York.
- Royal Commission on the Law Relating to Mental Illness and Mental Deficiency, 1954-1957. (1957). H.M.S.O., London.