Psychiatric Services in Matabeleland

A COMPARISON WITH SERVICES EXISTING IN DEVELOPED COUNTRIES

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SUMMARY

Some of the difficulties experienced with the introduction of community psychiatry into developed countries are reviewed. The dangers of transplanting such concepts piecemeal into an African context are stressed.

To provide some basis for planning psychiatric services in Matabeleland, a survey is made of patients at Ingutsheni Hospital, Bulawayo. The hospital populations at 31 December 1968 and 31 December 1971 are compared; and all patients discharged during the intervening 3 years are reviewed.

From the review it appears that about 40% of patients in hospital and 50% of patients discharged are schizophrenic, while about 20% of patients in hospital and 18% of patients discharged are epileptic. At least 34% of patients discharged have been admitted more than once.

From these figures it is suggested that a follow-through service aimed at reducing the number of schizophrenic and epileptic readmissions would be a practical first step towards improving services.

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Adriana: Hold, hurt him not for God's sake . . . he is mad . . .
Abbess: Be quiet people. Wherefore throng you hither?
Adriana: To fetch my poor distracted husband hence. Let us come in, that we may bind him fast, and bear him home for his recovery.

The Comedy of Errors (V, i).

However laudable and humane the motives for establishing the massive mental hospitals of the 19th century may have been, it gradually became apparent that they were largely therapeutically ineffective; once committed, patients seldom re-emerged.

Public apathy towards mental illness, overcrowding, lack of trained staff, lack of funds and various other practical difficulties conspired against successful treatment, but there were also important theoretical criticisms. Even under the best circumstances, committal to an institution alienates the patient from his family, friends and community, making his eventual reintegration extremely difficult. Isolation and estrangement from his family may facilitate his further withdrawal from reality. Moreover, the development of a staff hierarchy, with patients thrust into subordinate 'sick' roles, tends to lead the development of an 'inmate society'. This polarisation of staff and patient groups may become so extreme as to lead to the actual ill-treatment of patients; happily, such events are extremely rare.

As a consequence of the deficiencies of the mental hospitals, recent trends in Europe and America have been towards treatment of the mentally ill within the community. In 1963 President Kennedy declared in a special message to the 88th Congress: 'Central to a new mental health program is comprehensive community care . . . we need a new type of health facility, one which will return mental health care to the mainstream of American medicine, and at the same time up-grade mental health services.' In the Federal Act which followed, three principles of adequacy of community care were laid down: 'comprehensiveness, co-ordination and continuity'. Nevertheless, in the decade following this resounding message the functions, goals and structures of community care have not been clearly identified or defined.

In Britain the number of patients in mental hospitals reached a peak of 150 000 in 1954, representing 344/100 000 of the population. After the introduction of phenothiazine drugs in 1955, the numbers began to decline, until by 31 December 1968 there were 120 000; more hopeful administrative policies may also have been an important factor in this decline.[1]

In 1961 a survey of the future requirements for mental hospital beds forecast that the need would have further declined to 180/100 000 by 1975.[2] This survey anticipated that the function of the mental hospitals would be taken over by general hospitals and the community services. However, some 10 years later, a leading article in the *British Medical Journal* has this to say: 'Community care as it exists today has still to be proved to be much more than a resounding catch phrase'. Recently critics have been more outspoken: 'Since the mistaken optimism of the late 1950s, when Tooth and Brooke[2] predicted a rapid decline in hospital populations, their early and later critics have been vindicated, and many less hopeful forecasts have gained currency'.[3] The same author shows that, in his area at any rate, the expansion of general psychiatric units has affected only short- and medium-stay patients, and may have helped to withdraw active psychiatric interest from the large institutions and their long-stay patients. Similar misgivings were expressed by workers in America who felt that a two-level system of care could develop, with the chronic long-stay patient receiving scant attention.[4] In view of these observations, the most recent

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place estimate, from the Department of Health and Social Services in Britain, of 50 patients/100 000 population would seem to be wishful thinking.

The failure of the anticipated metamorphosis may be attributed to a number of factors. Local authorities have been reluctant to provide the facilities enjoined upon them by the 1959 Mental Health Act, trained and interested personnel have been lacking, and money has been short.

Given these prerequisites, community care has been shown to work under favourable circumstances. In an urban area of London, a psychiatric team based in a general hospital, backed by extensive community facilities, coped effectively over a 3-year period with the needs of a population of 92 000, with a 32-bed unit and 40 day hospital places.[5] In Blackburn it was possible to deal with 97% of all admissions from a catchment area with a population of 250 000, in a unit of 107 beds attached to a general hospital. By extensive use of day care and geriatric facilities it was possible to prevent any increase in the population of chronic cases over a 4-year period.[6]

Nevertheless, it must be borne in mind that because a particular scheme is successful, this neither validates the theoretical constructs upon which it is based, nor proves that the constructs are universally applicable. Moreover, there may be covert disadvantages. Patients who were formerly protected by the mental hospitals now swell the ranks of vagrants, the unemployed and criminals; one is faced with 'the spectacle of untreated schizophrenics drifting through lodging houses'.[7] Similar problems have been encountered in the USA, where the 'three masks' of chronicity have been identified as continual institutionalisation, repeated admission and marginal community adjustment.[4] These authors admit that study of the third group has hardly begun, but draw attention to the growing concern over the social costs of maintaining the severely emotionally disabled person in the community.

A recent review of the pitfalls of community psychiatry[8] lists 5 major fallacies; one of the more important of these is the fallacy that community psychiatry is minor psychiatry. To be able to recognise the early signs of mental illness requires an unusually long training, coupled with a mature sensitivity. It is most unfortunate that, in America at any rate, young psychiatrists sometimes abandon the disturbing challenge of treating individual patients in order to view them from the safe but obscuring distance of administrative posts, thus cutting short their maturing process. If there are not sufficient trained and mature personnel to meet the needs of the programme, people will feel let down by psychiatry and become resentful. Significantly in this context, the 32-bed unit previously mentioned was staffed by a consultant, 2 registrars and a senior house officer, while the 107-bed unit was staffed by one full-time consultant, 2 part-time senior psychiatrists, 1 part-time psychiatrist, 1 medical assistant, 1 registrar and 2 part-time clinical assistants.

Patterns of medical care developed in more sophisticated countries can rarely be transplanted to Africa without extensive revision and modification. Community psychiatry appears to be, at best, of controversial value in developed countries and extreme caution must therefore be exercised before extending its tenets to African patients.

A PSYCHIATRIC SURVEY IN AFRICA

We present a survey of some of the changes in a population of African patients at Ingutsheni Hospital, Bulawayo, over a 3-year period. The survey is in two parts, firstly, patients in residence on 31 December 1968 and on 31 December 1971, and secondly, patients discharged during the intervening 3-year period.

The figures for 1968 are disappointingly incomplete in many cases, so that valid comparisons are not always possible. For this reason and because of the brief period surveyed, any conclusions drawn must be regarded as tentative.

Patients in Residence

On 31 December 1968 there were 773 patients, 570 (74%) of whom were male. The corresponding figures for 1971 were a total of 684, 493 (72%) being male.

It was shown that the incidence of mental hospital admission varied directly with the ease of access,[9] so that this reduction may have been partly attributable to the introduction of a waiting list in 1966, but the introduction of a follow-through service is likely to have been more influential.

In 1968, 395 patients (51%) were simply classified as adult, vitiating any comparison. However, the number of children, that is those aged 0 - 14 years, fell from 48 (33 male) to 12 (7 male) over the 3-year period. Because of the absence of any facilities for children, none were admitted during the study period and the decline in number could be attributed to death, discharge or moving into the adult age group.

On 31 December 1971 there were 240 (49% of 493) male patients and 86 (42% of 191) female patients in the 15 - 39 years age group. The next largest group was 40 - 60 years of age with 213 (43%) males and 50 (26%) females. The senile group, i.e. those over 60 years, numbered only 27 (5,5%) males and 13 (7%) females. Thus there was no evidence of an accumulation of geriatric patients such as had been described in Britain.[3] Male patients outnumbered females by more than 2:1 in all age groups.

On 31 December 1968 345 patients (44,5%) had been admitted in terms of Section 11 of the Act, that is, in terms of a Reception Order issued by a magistrate.

The next largest category was in terms of Section 15, that is an urgent application supported by a single medical certificate, which comprised 243 (31%) patients. These categories were virtually unchanged in 1971, with 317 (46%) and 240 (35%) patients admitted in terms of Sections 11 and 15 respectively. There was an increase in the number of voluntary patients in 1971 to 85 (12%), as compared with 34 (4%) in 1968. This increase was partly at the expense of the categories unknown, which fell from 69 (9%) in 1968 to 6 (<1%) in 1971, and 'criminal', which fell from 71 (9%) in 1968 to 26 (4%) in 1971.

Criminal mental patients were admitted under four separate sections: Section 29(3) (mentally disordered prior to arraignment); Section 30(2) (mentally disordered while undergoing trial); Section 31(3) (special verdict—'guilty but

insane'—detained in terms of President's Warrant); and Section 32(4) (mentally disordered while serving sentence). All 4 categories showed a decrease.

Duration of Stay in Hospital

There was a marginal increase in the number of patients who had been in hospital less than 3 months in 1971 as compared with 1968; the figures were 73 (11%) as compared with 41 (5%). The number who had been in hospital for 3 - 6 months also increased marginally from 61 (8%) in 1968 to 79 (12%) in 1971.

Small declines occurred in the longer-stay patients. Those in the 1 to 2-year category numbered 313 (40%) in 1968 and 232 (34%) in 1971, while those who had been detained more than 10 years numbered 307 (40%) in 1968 as compared with 237 (35%) in 1971. It has been shown in Britain[3] that the longer a patient stays in hospital, the less the chance of discharge.

Modern methods of treatment have had most impact on short- and medium-stay patients, while the population of very long-stay patients, many of whom are schizophrenic with a low death rate, declines extremely slowly. In both American and British studies some 10% of schizophrenic admissions remained in hospital continuously over a 3-year period,[10,11] and the chances of discharge after 2 years were slender.

Diagnostic Categories

The principal diagnostic categories showed little change over the study period.

In 1968 there were 325 (42%) schizophrenic patients, of whom 246 were male. The corresponding figures for 1971 were 309 (45%) total, 232 being male. The next largest category was retarded development (with or without epilepsy), numbering 139 (18%), 106 male in 1968 as compared with 117 (17%), 82 male in 1971.

Epileptic patients numbered 127 (16%), 82 of whom were male, in 1968, with corresponding figures of 168 (25%), 120 being male, in 1971. Thus there was an absolute and relative increase in male epileptic patients, probably at the expense of the 'unknown' category, which shrank from 100 in 1968 to only 9 in 1971.

Another category which seemed to enlarge at the expense of the unknown one was that of manic depressive psychosis which, for men, increased from 0 to 25 over the 3-year period.

Significantly, the senile and presenile dementia category only changed from 20 to 26 patients between the two surveys, while there was a decline in patients with chronic brain syndrome from 24 to 7 patients.

The categories for neurotic illness (depression, anxiety state, dissociated state) together with pathological personality and acute brain syndrome, accounted for only a handful of patients and showed no significant change.

Province of Origin

The province of origin purported to reflect the usual place of residence of the patient wherever possible; that is, migrant workers or visitors temporarily resident in Bulawayo were classified in terms of their customary residence.

The 1968 figures were disappointingly incomplete, so that no strict comparison was possible, but it appeared that about 40% of patients in residence were admitted from Matabeleland, while more than 20% were from Mashonaland in both years surveyed. This is particularly significant, because no new cases were admitted from Mashonaland during the interim period, suggesting that there is a hard core of chronically ill patients from that area. One possible factor in this situation might have been that these patients were too remote from their families and communities for arrangements to have been made for their return home; that is, some of them may have been detained for social rather than psychiatric reasons.

Survey of Discharges

The total number of patients entering and leaving hospital during the 3-year study period are set out in Table I.

By simple arithmetic Table 1 should show 491 male and 197 female patients in residence as at 31 December 1971. The actual figures were 493 and 191 respectively. These discrepancies were not considered serious and the figures were presumed to be accurate. Only discharged patients

TABLE I. PATIENTS ENTERING AND LEAVING HOSPITAL DURING THE 3-YEAR STUDY PERIOD

	1969		1970		1971	
Cases entering hospital	Male	Female	Male	Female	Male	Female
Admitted	422	172	363	178	330	158
Returned from leave	22	7	10	3	9	3
Returned from central hosp.	18	12	26	10	21	12
Total	462	191	399	191	360	173
Cases leaving hospital						
Discharged	368	164	333	146	300	143
Released on leave	69	14	25	8	50	9
Transferred to General Hosp.	20	18	33	16	27	13
Died	29	11	23	12	23	7
Total	486	207	414	182	400	172

were considered, since the punch cards were not completed until the patient was discharged. The figures refer to cases, not actual patients, since many patients were admitted more than once.

Previous History

Sources of information were the patients themselves, the nominal roll of all admissions, and the recollections of the ward staff. All or any of these could be unreliable, even the nominal roll, since the use of aliases is very common, and the estimates were therefore minimal.

Nevertheless, a previous mental hospital admission was traced for 135 (25% of 532 discharges), 159 (34% of 479 discharges) and 150 (34% of 443 discharges) cases for 1969, 1970 and 1971 respectively.

Age Groups

The category over 60 years of age was not used before 1970 when the punch card system was revised, but these cases accounted for only 25 in 1970 and 8 in 1971.

Most cases fell in the 15 - 39 years of age category. For each of the three years there were 337 (63%), 294 (61%) and 284 (64%) respectively.

The next largest category was 40 - 60 years of age and this included 119 (22%), 118 (25%) and 116 (26%) cases for 1969, 1970 and 1971 respectively.

The male to female ratio was about 2:1 in all categories.

Diagnostic Categories

Unfortunately, different diagnostic categories were made on the 1969 punch cards which proved impossible to transfer into the new categories accurately. The figures for 1970 and 1971 are set out in Table II.

In a survey of first admissions to a 2 700-bed State Institution in Connecticut covering the period 1942 - 1964,[12] a sharp increase was found in alcoholic states, personality disorders, psychoneurosis and drug addiction. This has not been the case in our own practice where schizophrenia and epilepsy still constitute the bulk of the workload.

Manic depressive psychosis was rarely diagnosed, but this may reflect a difference in diagnostic practice; the acute hypomanic episodes not infrequently encountered in African patients are usually diagnosed as schizophrenic in our own practice, but may well be labelled manic-depressive elsewhere.

The importance of depression has been dealt with elsewhere.[13]

Duration of Stay

In 1969 there was no separate category for those cases who were discharged after less than a month in hospital; 359 (67%) cases discharged had been in hospital less than two months in that year. In 1970 and 1971, 153 (32%) and 147 (32%) cases in each year respectively were discharged after less than a month in hospital.

For the less than 2 months' category the comparable figures were 95 (20%) and 74 (17%) for 1970 and 1971 respectively.

Thus the majority of patients stayed in hospital only a short time; about a third of all discharged patients had been in hospital less than a month, more than half less than 2 months. Nevertheless, significant rates of discharge were obtained up to, and even after, 2 years in hospital.

The short stay of most discharged patients, taken in conjunction with the small numbers of short-stay patients resident in the hospital at any one time, was taken to indicate that, while the bulk of the beds were occupied by chronic long-stay patients, a comparatively small number of beds were being very heavily worked for the management of acute illnesses.

Thus the hospital was performing at least two distinct functions and some segregation was deemed advisable. Consequently separate admission units of 60 beds for male and 24 beds for female patients were established.

TABLE II. DIAGNOSTIC CATEGORIES FOR PATIENTS DISCHARGED DURING THE 3-YEAR STUDY PERIOD

	1970		1971	
Diagnostic category	Male	Female	Male	Female
Schizophrenia	156(47%)	81(55%)	132(44%)	64(45%)
Manic depressive psychosis	1	1	0	0
Depression	16 (5%)	11(7%)	14(4,5%)	18(13%)
Anxiety state	3	1	1	0
Dissociated state	5	3	2	9
Acute brain syndrome	39(12%)	5(3,5%)	37(12%)	9(6%)
Chronic brain syndrome	16(5%)	5(3,5%)	19(6%)	7(5%)
Pathological personality	6	6	6	1
Epilepsy	62(18%)	20(14%)	59(20%)	21(15%)
Senile and presenile	7	3	4	7
Retarded development	5	1	5	4
Not mentally disordered	9	6	12	4
Unknown	8	3	9	1
	333	136	300	145

Section of the Act

The proportion of cases discharged who were admitted voluntarily remained relatively constant; the figures were 226 (42%), 207 (43%) and 180 (41%) for 1969, 1970 and 1971 respectively.

The proportion of cases discharged before the process of certification was completed also remained steady. The figures were 70 (13%), 59 (12%), and 60 (14%) for each of the 3 years respectively. Most of the remaining discharges were of male criminal mental patients; the figures were 83 (23% of 368 male discharges), 65 (20% of 333 male discharges) and 52 (17% of 300 male discharges) for 1969, 1970 and 1971 respectively.

Thus the hospital performed a considerable forensic function in the evaluation and treatment of criminal mental patients. Again, some segregation of function was considered desirable in this area if the admission units were to function efficiently.

Mode of Presentation

It was interesting to note that more than a quarter of all cases discharged had presented with aggressive behaviour; and more than a third had presented with either aggressive or antisocial behaviour (sometimes both). This confirmed an earlier observation in Malawi that African society seems tolerant of deviant behaviour, unless there is a serious threat of personal injury or destruction of property.[9]

DISCUSSION

As about 80% of our hospital population are long-stay patients and about 40% are schizophrenic, our problems are comparable with those found elsewhere,[3] although geriatrics does not assume as great importance. The comparatively small number of geriatric patients may be a reflection of the population structure; at the time of the 1969 census, 49,5% of the population was under 15 years of age. Cultural factors may also play a part, as tribal society is generally much more willing to take care of its aged. However, with the migration of young male adults to the cities to find work, an increasing burden is being placed on those who remain behind in the Tribal Trust lands, and the situation requires continual review.

The view has been expressed that closure of psychiatric hospitals should not be contemplated until adequate alternative facilities are available. It seems reasonable to conclude that the provision of alternative facilities within the community would necessitate a capital investment beyond the capacity of any developing country such as Rhodesia. For the foreseeable future then, Ingutsheni Hospital will have to undertake the care of long-stay patients from Matabeleland, although efforts are currently being made to establish a subnormal unit elsewhere.

If this is to be official policy, then it should be unequivocally stated; the policy of planned obsolescence for the large mental hospitals in Britain has been disastrous for morale and recruiting among staff.

Moreover, the large mental hospital, by virtue of its size, provides a wide variety of experience for the training of psychiatric nurses, which strengthens the view that it would be wise to delay the transfer of acute facilities.

While advocating the retention of Ingutsheni Hospital as the focal point of the psychiatric services for Matabeleland, it must be accepted that considerable improvement is necessary to obviate some of the ills previously described. Although a full-scale therapeutic community would not be feasible, many of the ideas and concepts behind the scheme[14] could be implemented at comparatively little cost.

The majority of patients admitted to the hospital are adults in middle life, suffering from either epilepsy or schizophrenia. Many are readmissions, and it appears that a useful first step towards improving the efficiency of psychiatric services would be the prevention of readmission.

As a result of a study in New Hampshire, the authors suggested that many schizophrenic patients now released would formerly have become part of the long-stay hospital population. Such patients tend to become involved in a circular current 'in and out' of hospital; they expected 50% of all admissions to be readmissions, and 50% of all readmissions to be multiple readmissions with two or more previous periods in hospital.[15] Unfortunately an intensive study over 3 years of nearly 600 discharged schizophrenics failed to reveal any reliable clinical indicators of prognosis; psychiatrists' predictions of relapse were only 7% better than chance.[16]

The value of maintenance medication in preventing the readmission of epileptic patients is readily demonstrable, but the long-term management of schizophrenic patients requires more careful consideration.

Experience with a chemotherapeutic programme showed that patients referred to a mental health service on discharge were readmitted significantly less often during the ensuing year than patients who were not so referred; the rates given were 56,4% and 32,8% respectively.[16]

That the duration of remission and the incidence of relapse were related to the maintenance of medication has been convincingly demonstrated in at least 2 double-blind trials in the USA. One group of investigators found that 28,6% of the placebo group were readmitted over an 18-month period, as compared with 18,2% of the group treated with promazine and 4,8% of the group treated with chlorpromazine.[17] The other workers reported that 83% of the patients on drugs remained in the community, as compared with only 55% of the placebo group over an 18-month period.[18] The relationship between stopping phenothiazines and relapses was also demonstrated in a British study.[19]

There are difficulties inasmuch as the availability of after-care services may outweigh clinical considerations in determining the patient's readiness for release. Moreover, as many as 40 - 50% of discharged schizophrenics may fail to take the medication prescribed for them. However, these difficulties may be remedied, at least in part, by tightening administrative control of the detection and visiting of defaulters.

An attempt has been made to identify some of the factors which cause patients to default. Those whose symptoms are poorly controlled have difficulty in getting

on with people. As a result they often live alone or with an indifferent or even antagonistic relative. The patients are poorly motivated to take their phenothiazines and are often discouraged from doing so by relatives or friends who have no sympathy with prolonged medication when the patient is well. By directing administrative and educational efforts at such vulnerable patients and their families it should be possible to reduce the rate of defaulting. Such obvious and elementary measures as giving patients clear, unambiguous instructions about medication, may be helpful, for it has been shown that, even under ideal conditions, patients forget between one-third and half the instructions given to them. Occasionally general practitioners are reluctant to prescribe phenothiazines in adequate doses, and education in this area may be needed.

Several years ago, depot injections of phenothiazines were shown to be at least as effective as oral preparations in the management of schizophrenic patients in hospital. More recently it has been demonstrated that outpatients given long-acting fluphenazine decanoate injections at monthly intervals showed only an 8% relapse rate as compared with 66% for the placebo group over a period of 9 months.[20] Further, the patients treated with fluphenazine were much less of a burden on their families, inasmuch as aggressive outbursts, noisiness and socially embarrassing behaviour became significantly less than in the control group. Preliminary surveys have found rates of defaulting from injections to be 15 - 20%, which are considerably lower than the 40 - 50% usually given for oral phenothiazines.

Having taken these factors into consideration, it was decided that, as a first step, it would be practicable to establish a series of follow-through clinics throughout Matabeleland, with the prime object of preventing re-admission by means of the supply and supervision of maintenance medication. It was considered that the African community already gives considerable support to the mentally ill and any further steps towards community care should only be made in response to clearly-defined needs and within the resources available—both human and financial.

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