THE CLOSURE OF A LONG-STAY PSYCHIATRIC HOSPITAL

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by

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Introduction

“We have officially visited this establishment, which at present contains 41 female patients. They all appear to be in good bodily health, and they present a most comfortable and satisfactory appearance. We learn with pleasure that during their residence here, the general conduct of the patients has been most orderly, and the experiment of removing them from the County Asylum, and placing them in an ordinary dwelling house has been entirely successful. Although the staff of attendants has been very small, consisting only of two nurses, a housemaid and a cook; no disturbances or difficulties have occurred, nor has any part of the house been injured in the smallest degree.”

The Commissioners in Lunacy,

September 1857, (Bucknill, 1858)

Although the concepts of ‘deinstitutionalisation’ and ‘community care’ originated in the 1950’s, the issue of where best and how best to care for the mentally ill has a much longer history. Prior to 1800 most people with mental health problems remained with their families. Others were vagrant or were found in either workhouses or prisons. Some private or voluntary hospitals such as The Retreat in York and The Bethlem in London did exist but the era of institutionalised care was founded in 1808 with the County Asylum Act which enabled every county to provide an asylum. The success of this and subsequent Acts was such that the number of mental illness beds grew rapidly,
from just over 11,000 in 1845 to over 83,000 by the end of the century, and continued to rise to a peak of nearly 150,000 in 1955 (Mental Health Task Force 1993). Since then a turn around in government policy has required mental illness hospitals to close and to be replaced by alternative provision. Such a radical change in policy occasioned much debate and concern, all of it characterised by a striking lack of hard data. This abruptness of this policy compared unfavourably with the planned and balanced deinstitutionalisation process carried out elsewhere for example in Finland (Pylkkanen 1994). But in England what is now recognised as uninformed ‘therapeutic optimism’ held sway.

"Most people who need long-term care can and should be looked after in the community. This is what most of them want for themselves and what those responsible for their care believe to be best" declared the Department of Health and Social Security in 1981. In practice patients were rarely, if ever, consulted about what they wanted for themselves, and those responsible for their care were divided in their opinions as to what was best. Perhaps the only agreement amongst professionals at this time was that there was a pressing need to evaluate hospital closures if informed judgements were to be made,

"The failure to have evaluated adequately the effect of discharging hundreds of thousands of chronically ill patients from large public mental hospitals has been a major defect in the conduct of public policy" (Braun et al 1981).

cont’d ...
Such was the context when the closure of Saxondale Hospital in Nottinghamshire was announced in 1985. The Health Authority appointed a Project Team comprising a Nurse Manager, three psychiatric nurses, one occupational therapist, one part-time Clinical Psychologist and a part-time psychology assistant. The team's brief was to facilitate the transfer of patients from the hospital to various community settings. As the Clinical Psychologist in post I secured management support to evaluate the process. This evaluation was subsequently published in two research papers which are presented here. Now, ten years after first joining the project team and three years after the publication of a five year follow-up paper it is opportune to appraise the research, and to compare these findings with relevant data from other projects.

Research Appraisal

Method

All research is bound by a framework that determines what questions one may seek to answer. In this instance, the research framework was dependent on a closure programme that had been managerially determined in the absence of clinical or research-based reasoning. It did not prove possible to manipulate potentially significant variables such as the time-scale for individual transfers, ward environments or staffing levels, neither could we evaluate the differential effectiveness of particular rehabilitation packages or instigate action research cycles to learn as we proceeded. Rather, we were presented
with a closure timetable which determined that patients would be relocated to their district of origin as soon as the alternative, predetermined accommodation became available. The first move was scheduled for just six months after I had taken up my post, the final group were scheduled to move about twelve months after that. Whilst this presented methodological limitations, notably a brief 'baseline' period for the first group, it also had the advantage of a more 'random' patient allocation which avoided the "creaming off" problem noted elsewhere (Carson et al 1989). At the same time however the patient group did not form a homogenous sample on either sociodemographic or clinical grounds. How then to assess the impact of a change of environment in the absence of a randomised control design? A longitudinal N=1 design was the only option, but one which has been the research's strength and which distinguishes this study from its contemporaries. In a paper discussing the various 'architecture' of research designs, Feinstein (1978) locates the cohort or longitudinal study in which a group of subjects is studied prospectively as the most powerful in terms of its ability to generalise results and uncover aetiologies. In addition to the methodological robustness of this design, other advantages were recognised. It became clear that the run down of a hospital and the transfer of patients to other settings was a process worthy of investigation. To compare point A before and point B after the transfer was to oversimplify and reduce a process of change that possibly had already begun and which had no pre-determined end point. A longitudinal cont'd ...
study would shed light on this process. In addition this design would enable investigation of individual change which may facilitate clinical decision making.

ii) Outcome Measures

In a review of the evaluation of outcome for psychiatric patients after discharge from hospital published at that time (Avison and Speechley 1987) six forms of outcome criteria were noted: the hospital readmission rate, the interval before admission, social role performance, social adjustment, symptom levels and combined global ratings. They also noted that studies rarely employ the full range of measures that reflect the complexities of assessing residential care. Since a significant impetus for deinstitutionalisation was concern with the conditions in large hospitals (there were 14 hospital inquiries in Britain from Ely in 1969 to Rampton in 1980, Martin 1984) ‘quality’ issues were as important as symptom and behavioural measures. This is a point that was to be stressed in the patients charter much later. “The only justification for deinstitutionalisation and its accompanying upheaval is that the potential and actual quality of life enjoyed by the mentally ill person is significantly improved by moving out of the hospital into the local community” (Department of Health 1992). But how to assess it? The methodological and conceptual problems have been well documented in the cont’d ...
literature and it is fair to say that research techniques have become increasingly sophisticated in this area during the last ten years or so, (Barry et al 1993). However, concerns about the validity of patients' self-report (Lehman 1983a) steered earlier thinking away from subjective measures towards the measurement of objective, verifiable indicators. The quality of care assessment employed in this research was a locally well-known scale which had been usefully utilised in the field of learning difficulties. It had proven itself to be a useful feedback device which had stimulated changes in both staff practice and service provision. An implicit expectation of employing this measure in this research was that it might function as a measure of change in the short term but also, at a later date, as a mechanism of change. In my choice of this measure - as with others - my dual role as practitioner and researcher was an influence. While I was not later disappointed by the scale's utility as a component of the Audit Cycle, by taking the observer's rather than the participant's viewpoint it clearly does fall short as a measure of patients' "satisfaction". Undoubtedly the research would have been enhanced by the addition of patients' own reports of their sense of well-being and life quality in either global or specific areas, for example Lehman's Quality of Life Interview (1982) or the Lancashire Quality of Life Measure (Oliver, 1991). In a recent comprehensive study of 25 residential settings Shepherd et al (1995) investigate other aspects of care such as management styles, the quality of staff-patient interaction and the physical attributes of each setting, which clearly add important additional information.

cont'd ...
They also examined the relative financial costs of each setting. No attempt was made to examine cost in my research, but this has since become possibly the central issue in the minds of many purchasers and providers. Knapp and Beecham (1991) argue that cost data is an essential aspect of any service evaluation and can provide important policy and practice insights. Later studies have drawn our attention to the considerable variation in costs of residential care, with statutory services tending to be more expensive than the independent sector (Netten and Smart, 1993; Shepherd et al 1995). It is perhaps a sign of changing times that ‘costs’ were not an explicit issue in Nottinghamshire in 1987.

Findings - their contribution to the literature

In a 1993 review of studies relevant to the evaluation of mental hospital closure it was lamented that “no study can be identified in the literature in which the effects of the closure of a mental hospital are prospectively assessed for the entire long stay population” (O’Driscoll, 1993). This situation was altered with the publication of the Saxondale closure results, and later on by a much more substantial body of evidence from the work of the TAPS team. However, as late as 1993 the relevant UK literature was largely census studies (undertaken to compare local populations with the long-stay population ‘run down’ predicted by Tooth and Brooke in 1961) although some case-register studies and studies of already discharged patients were also available. (For a cont’d...
review of outcome studies, see O'Driscol, 1993). Evidence from other countries, notably USA and Italy was also largely of a cross-sectional measure, supplemented by considerable numbers of anecdotal or polemical accounts.

It was then important to publish longitudinal data, and the Saxondale report was an early pioneer. Similarly the initial study of the effects of the run down period remains the only published study of behavioural change during this period. It remains an area that warrants further research. Most studies of hospital vs community take place in the context of hospital run down, raising questions of the validity of baseline scores and the impact of declining standards on subsequent adjustment. Findings from my research were generally positive, low staff morale, inter-hospital moves for patients and a deteriorating physical environment did not result in the anticipated behavioural deteriorations, but it would be useful to know whether this was so elsewhere.

Following the move to community settings significant improvements in the quality of care were apparent, in addition overall general behaviour improved, however deviant behaviour worsened. Subsequent analyses demonstrated that the overall changes were accounted for by a minority of individuals. For most patients, there was no significant change in behaviour following transfer from hospital.

cont’d ...
These findings have since been complemented by other studies. The most substantial body of evidence comes from the findings of the TAPS team who have been studying the closure programmes at Friern and Claybury Hospitals; (Leff 1993). These central findings from a matched group research design show that patients who have been transferred to a variety of community settings show less “negative” symptoms, improved social integration and report higher levels of satisfaction than controls who remain in hospital. Similar findings were reported from the closure of the North Wales Hospital (Crosby et al 1990) and Cane Hill Hospital (Pickard et al, 1992). In all these studies positive changes were not apparent immediately but became apparent 1-2 years after discharge confirming the importance of assessing a change process rather than a static outcome.

These generally positive findings mask individual variation in adjustment. The number of people who fared either badly or very well after their transfer from Saxondale Hospital was too small to allow a regression analysis. It would be surprising if one form of provision was right for everyone, but it remains a general failing that the published research still does not discriminate individual or interaction effects. A possible exception is the “challenging behaviour” group, which continues to occasion considerable debate and some concern. However, the differential impact of various forms of care setting has cont’d...
still not been evaluated, even for this client group. After about 40 years of 'community care' policy we can just about answer the broad question of hospital vs community but what is best for an individual remains moot.

A rare exception is David Winter's work which explores reactions to hospital resettlement from a personal construct theory perspective (Winter, Baker and Coggins, 1992). There have been few attempts to assess psychiatric inpatients' views by means of repertory grid technique, however these studies showed it to offer a useful methodology and theoretical framework which elucidates individuals different perspectives on the change process. Winter also makes the important point that the transition from hospital to community involves a meeting of constructs from patients, staff, policy makers and the receiving 'community' members. The congruence/incongruence of key constructs between the various stakeholders may well be an important variable in the change process.

In its emphasis on patients' behaviour the Saxondale research possibly responded to the concerns of policymakers. It represents a small-scale epidemiological study of patients' symptoms. It neglects the internal cognitive or affective processes that effect and are effected by the behaviour of self and others. In this, the research mirrors a general tendency in the care and treatment of people with long-term mental health problems: a tendency to see...
them as passive recipients of treatments or policies, or in this instance as subjects of investigation rather than as active participants in collaborative decision making processes. Ten years on, with a growth in the number of secure and semi-secure settings, with case-registers, supervision orders, and some of the more oppressive sides of CPA this tendency appears to be alive and strong.

Conclusions

The closure of Saxondale Hospital was significant for local mental health services, but was also significant as an early evaluation of a national policy. As such it was important to investigate the impact of the closure. The research design (longitudinal N=1 x total sample) enabled general conclusions to be reached, but perhaps more importantly also enabled individual responses to be examined. For most patients, in most ways studied, the run-down and closure of the hospital, and their relocation to community settings had little observable impact. However for some, relocation led to significant improvements whilst for others it led to significant deteriorations. These findings highlighted the lack of homogeneity in the group and emphasised the need for local, individualised, care plans - a need that despite widespread recognition, is often overlooked. The regular, repeat assessments which were instigated to investigate the effects of the hospital closure were maintained for all cont'd...
residential patients in this health trust until only a year or so ago when staff changes led to their close. They provided a rich source of individualised longitudinal baseline data against which we could evaluate other changes in, for example, setting, medical personnel, medication, or ageing as well as the collated data providing a sound basis for audit and service evaluation. In this way the Saxondale closure research instigated a systematic form of inquiry which remained part of the local mental health culture for many years.

Nationally, the benefits of the research are less clear. It contributes to a body of work of some substance, however like so much research it’s links to practice are tenuous. There is no evidence to suggest that subsequent hospital closures have been or will be informed by these or other research findings. Health Trusts have to make difficult decisions. Evidence of clinical effectiveness is only a part of a decision-making process which includes - and often gives precedence to - financial and ideological considerations. The Saxondale research addressed a part of these considerations. Researching the area ten years on would involve asking much broader-based questions.
REFERENCES


VM. Francis • P. Vesey • G. Lowe

The closure of a long-stay psychiatric hospital: a longitudinal study of patients' behaviour

Abstract
This paper summarises longitudinal data based on repeat assessments of the behavioural functioning of 90 long-stay psychiatric patients. Data were gathered over a period of 4-5 years that spanned a hospital closure and the resettlement of patients in various alternative settings. Time-series analyses of individual data sets showed that resettlement led to no significant behavioural change in the majority of patients. However, some significant behavioural improvements were evidenced for approximately 20% of the group, while behavioural deterioration occurred in approximately 12%. Supplementary findings showed that following resettlement the quality of care provided significantly improved in many respects. However, access to social, recreational or vocational activities was reduced. In addition, the level of physical health symptomatology was shown to increase for this group of patients.

Method
Between May 1987 and the final closure of Saxondale Hospital in December 1988, 108 long-stay psychiatric patients were transferred from the hospital to various settings within the Central Nottinghamshire Health District. Most (66) took up residence in purpose-built, domestic style bungalows located on three sites across the district. One small group (8) was resettled in a social services run hostel, while another group (10) went to a purpose-built unit for patients with challenging behaviour. Others (18), however, needed full-time nursing care and were transferred to hospital-based psychogeriatric wards. In addition, five patients went to their family homes or private nursing homes (not necessarily in this health district) and one other was placed in a hospital-based ward for people with severe brain damage. Of the total 108 patients, 8 died within 6 months of transfer, so that insufficient follow-up data were available (7 women and one man; mean age = 76.6 years, range 63-86 years; cause of death bronchopneumonia in all cases, with additional breast carcinoma in one case). The 5 patients transferred to private or family homes, the 1 brain-damaged patient and 4 others were also excluded from this study due to impracticalities in gathering follow-up data. This report refers to the remaining 90 patients only.

Beginning in March 1987 (when new admissions to the hospital formally ceased), all patients resident in the hospital who were to be...
Table 1  Average REHAB scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-move</th>
<th>Post-move</th>
<th>Significance</th>
<th>95% pre-move confidence interval</th>
<th>95% post-move confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social activity</td>
<td>22.5</td>
<td>20.3</td>
<td>$t = 2.63, P &lt; 0.02$</td>
<td>21.4–23.7</td>
<td>19.2–21.5</td>
</tr>
<tr>
<td>Community skills</td>
<td>9.5</td>
<td>8.0</td>
<td>$t = 2.89, P &lt; 0.02$</td>
<td>9.0–9.9</td>
<td>7.4–8.5</td>
</tr>
<tr>
<td>Speech skills</td>
<td>6.1</td>
<td>5.0</td>
<td>$t = 4.061, P &lt; 0.001$</td>
<td>5.7–6.6</td>
<td>4.6–5.5</td>
</tr>
<tr>
<td>Disturbed speech</td>
<td>5.1</td>
<td>4.9</td>
<td>n.s.</td>
<td>4.7–5.5</td>
<td>4.4–5.2</td>
</tr>
<tr>
<td>Self-care</td>
<td>15.2</td>
<td>14.1</td>
<td>n.s.</td>
<td>14.2–16.3</td>
<td>12.9–15.1</td>
</tr>
<tr>
<td>General behaviour</td>
<td>56.3</td>
<td>51.2</td>
<td>$t = 2.67, P &lt; 0.02$</td>
<td>53.7–59.0</td>
<td>48.1–53.8</td>
</tr>
<tr>
<td>Deviant behaviour</td>
<td>1.3</td>
<td>1.9</td>
<td>Wilcoxon $P &lt; 0.02$</td>
<td>1.2–1.5</td>
<td>1.7–2.1</td>
</tr>
</tbody>
</table>

Fig. 1 Graph showing a significant improvement in REHAB total general behaviour (GB) scores following transfer from hospital (n = 59; pooled variances $t = 2.67, df = 14, P < 0.02$)

relocated to this district were assessed on one of two standardised measures of behavioural functioning. Assessments were repeated at regular intervals up to the time of each patient’s transfer and thereafter for a follow-up period of up to 3 years. In this way longitudinal data were available in which each individual acted as his/her own control. The assessment procedures, either REHAB or CAPE depending on the patient’s age, are outlined below:

1. REHAB (Baker and Hall 1984) is a comprehensive behaviour rating scale designed to assess people with a major psychiatric disorder. It comprises five subscales: social activity (SA), speech skills (SS), disturbed speech (DS), self-care (SC) and community skills (CS) that together form a total general behaviour rating (GB). In addition, REHAB measures deviant behaviour (DB). Inter-rater reliability of this scale has been shown to be satisfactory (Carson et al. 1988). Fifty-nine patients were regularly assessed using this scale.

2. CAPE (Pattie and Gilleard 1979) consists of two independent measures of cognitive (CAS) and behavioural (BRS) disability designed for use with the elderly. Scores are graded A–E, representing a continuum of levels of functional impairment and dependency. Grade A represents no mental impairment and independent living, while grade E represents the severely impaired maximum dependency group. Forty-nine patients were regularly assessed using this scale. (Please note that nine patients were assessed using both CAPE and REHAB).

Repeat measures of the CAPE and REHAB scales were undertaken at 3- to 4-month intervals during the course of the 5-year study. This yielded an average of seven consecutive measures per patient during both the baseline (hospital) and the resettlement periods. In addition, the following checklists were completed on two occasions prior to the move and on two occasions thereafter.

1. The Quality of care Checklist (Collins et al. 1988) is an assessment of the rights and opportunities afforded to individuals in various care settings.

2. The Physical Health Checklist is a checklist of physical symptoms, illnesses and disabilities rated by severity, and completed by ward staff.

3. The Activities Checklist is a checklist of social and recreational activities rated by ward staff according to the range and frequency of engagement.

Subjects
Details of the 90 patients involved in the study were as follows. The average age at transfer was 63 years (range 29–86 years). The average length of hospital stay was 18 years (range 1–59 years). There were 49 men and 41 women. The primary diagnosis was schizophrenia in 59 patients, depression in 12 patients, dementia in 10 patients and other diagnosis in 9 patients.

Results
REHAB
Table 1 summarises the overall changes in behaviour functioning for the group of 59 patients assessed using the REHAB scale. Data were based on average scores for all patients taken on eight consecutive occasions at 3- to 4-month intervals prior to transfer, and thereafter on another eight consecutive occasions at 3- to 4-month intervals following transfer (i.e. a total of 16 assessments over a period of 4–5 years).
Results showed that overall behavioural functioning improved significantly in the following areas: SS, SA and CS. These improvements were reflected in an improved total GB score following transfer, and are presented graphically over time in Fig.1. However, no statistically significant changes were found in levels of DS or SC.

In addition, findings showed a statistically significant increase in overall levels of DB following transfer. This subscale measures physical and verbal aggression, absconding, incontinence, sexually offensive behaviour and episodes of talking or laughing to self. DB scores over time are graphically represented in Fig.2.

In order to assess the extent to which these overall average effects masked individual variation, scores for each individual were analysed using a time-series procedure (Tryon 1982) designed to measure changes in both the level and slope of longitudinal data. Results showed that significant ($P < 0.05$) improvements in total GB occurred for 10 patients, and in DB for 4. Similarly, 4 patients significantly deteriorated in terms of GB and 3 in terms of DB. Overall, results were therefore influenced by changes in a minority of individuals. For most patients (upwards of three-quarters), levels of functioning were unchanged following transfer.

### Table 2 Average CAPE scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-move</th>
<th>Post-move</th>
<th>Significance</th>
<th>95% pre-move confidence interval</th>
<th>95% post-move confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical disability</td>
<td>4.3</td>
<td>5.5</td>
<td>$t = 2.59, P &lt; 0.03$</td>
<td>4.1– 4.8</td>
<td>5.0– 5.8</td>
</tr>
<tr>
<td>Apathy</td>
<td>6.0</td>
<td>6.2</td>
<td>n.s.</td>
<td>5.5– 6.1</td>
<td>5.7– 6.4</td>
</tr>
<tr>
<td>Communication difficulty</td>
<td>0.7</td>
<td>1.0</td>
<td>n.s.</td>
<td>0.6– 0.9</td>
<td>0.8– 1.2</td>
</tr>
<tr>
<td>Social disturbance</td>
<td>1.75</td>
<td>1.5</td>
<td>n.s.</td>
<td>1.6– 2.0</td>
<td>1.4– 1.8</td>
</tr>
<tr>
<td>Information/orientation</td>
<td>5.3</td>
<td>4.9</td>
<td>n.s.</td>
<td>4.4– 5.5</td>
<td>4.1– 5.3</td>
</tr>
<tr>
<td>Mental ability</td>
<td>5.3</td>
<td>5.1</td>
<td>n.s.</td>
<td>4.5– 5.6</td>
<td>4.7– 5.9</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>4.6</td>
<td>4.8</td>
<td>n.s.</td>
<td>3.6– 4.9</td>
<td>4.1– 5.4</td>
</tr>
<tr>
<td>Total CAS</td>
<td>15.3</td>
<td>14.7</td>
<td>n.s.</td>
<td>12.6–15.7</td>
<td>12.7–16.0</td>
</tr>
<tr>
<td>Total BRS</td>
<td>12.7</td>
<td>13.9</td>
<td>n.s.</td>
<td>12.0–13.5</td>
<td>13.1–14.8</td>
</tr>
</tbody>
</table>

### Table 3 Percentage of patients significantly improving or deteriorating following transfer from psychiatric hospital

<table>
<thead>
<tr>
<th></th>
<th>Improvement (%)</th>
<th>Deterioration (%)</th>
<th>Same (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHAB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social activity</td>
<td>15.3</td>
<td>5.1</td>
<td>79.7</td>
</tr>
<tr>
<td>Speech disturbance</td>
<td>6.8</td>
<td>6.8</td>
<td>86.4</td>
</tr>
<tr>
<td>Self-care</td>
<td>10.2</td>
<td>5.1</td>
<td>84.7</td>
</tr>
<tr>
<td>Community skills</td>
<td>20.3</td>
<td>5.1</td>
<td>74.6</td>
</tr>
<tr>
<td>Speech skills</td>
<td>8.5</td>
<td>0</td>
<td>91.5</td>
</tr>
<tr>
<td>Total general behaviour</td>
<td>17.0</td>
<td>6.8</td>
<td>76.2</td>
</tr>
<tr>
<td>Deviant behaviour</td>
<td>6.8</td>
<td>5.1</td>
<td>86.1</td>
</tr>
<tr>
<td>CAPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information/orientation</td>
<td>2.5</td>
<td>10.0</td>
<td>87.5</td>
</tr>
<tr>
<td>Mental ability</td>
<td>7.5</td>
<td>7.5</td>
<td>85.0</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>5.0</td>
<td>2.5</td>
<td>82.5</td>
</tr>
<tr>
<td>Physical disability</td>
<td>7.5</td>
<td>2.5</td>
<td>90.0</td>
</tr>
<tr>
<td>Apathy</td>
<td>5.0</td>
<td>7.5</td>
<td>87.5</td>
</tr>
<tr>
<td>Communication difficulty</td>
<td>2.5</td>
<td>0</td>
<td>97.5</td>
</tr>
<tr>
<td>Social disturbance</td>
<td>2.5</td>
<td>2.5</td>
<td>95.0</td>
</tr>
<tr>
<td>CAS</td>
<td>7.5</td>
<td>5.0</td>
<td>87.5</td>
</tr>
<tr>
<td>BRS</td>
<td>7.5</td>
<td>2.5</td>
<td>90.0</td>
</tr>
</tbody>
</table>

CAPE

Table 2 summarises the overall changes in behavioural and cognitive functioning for the group of 40 patients assessed using the CAPE scale. Data were based on average

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1 A critical value of 1.64 may be applied to the statistic for all sample sizes between 8 and 25. For a discussion of this point see Tryon 1982.
Fig. 3 Quality of care: changes in percentage of unmet rights pre- (■) and post-transfer (□) from hospital (n = 90)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Improved</th>
<th>Deteriorated</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (years)</td>
<td>60</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Mean length of stay (years)</td>
<td>19</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Percentage female</td>
<td>27</td>
<td>5</td>
<td>68</td>
</tr>
<tr>
<td>Percentage male</td>
<td>14</td>
<td>12</td>
<td>74</td>
</tr>
<tr>
<td>Mean no. physical health symptoms</td>
<td>2.3</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Mean no. activities</td>
<td>5.2</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Mean REHAB – GB</td>
<td>53.0</td>
<td>71.6</td>
<td>54.8</td>
</tr>
<tr>
<td>Mean REHAB – DB</td>
<td>1.5</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Mean CAPE – BRS</td>
<td>10.9</td>
<td>11.5</td>
<td>14.1</td>
</tr>
<tr>
<td>Mean CAPE – CAS</td>
<td>21.7</td>
<td>19.4</td>
<td>11.2</td>
</tr>
</tbody>
</table>

All other subscales showed improvements in less than 10% of the group. The percentage of patients deteriorating did not rise above 10% for any subscale, with information/orientation being adversely affected in the largest group (10%).

Further analyses were undertaken to establish whether certain characteristics distinguished between the “deteriorated”, “improved” or “no change” subgroups. No differences between subgroups were found on the following dimensions: patient age, patient length of stay, patient gender, number of reported physical health symptoms and number of social and recreational activities. There were insufficient numbers in the “deteriorated” CAPE and REHAB subgroups to warrant statistical analyses (CAPE “deteriorated” n = 3; REHAB “deteriorated” n = 6). However, visual inspection of average pre-move REHAB GB scores suggested higher levels of dependency in the “deteriorated” subgroup than in the “same” or “improved” subgroups. This relationship did not hold either for REHAB DB scores or for CAPE BRS and CAS scores. The characteristics of each subgroup are summarised in Table 4.

Quality of care

Figure 3 shows differences in the average levels of quality of care offered by the hospital (pre-move) and by the receiving environments (post-move). The graph shows significant improvements in the following areas: the right to privacy, the right to a choice of home, the right of access to the community, the right of therapeutic interventions, the right to a hearing, the right to education and the right to vote. These improvements were reflected in statistically significant improvements in the overall total quality of care level. In hospital, approximately 50% of patients’ rights remained unmet. This figure was reduced to 37% following transfer (n = 86, t = 9.7, P < 0.001).

There were no changes in the following areas: the right to a choice of religion, the right to love, the right to marry,
Fig. 4 Number of physical health symptoms and their severity pre-and post-transfer from hospital. (Data for 1 patient were not recorded: n = 89)

Fig. 5 Differences in average range and frequency of activities entered into pre- and post-transfer from hospital. (Data on range were not recorded for 4 patients: range, n = 86; frequency, n = 90)

The right to financial independence and the right to NHS services. It may be noted that the rights both to a choice of religion and to NHS services were well met both before and after transfer for most patients. However, rights to marry and to financial independence remained less well met, reflecting staff belief that many patients are ineligible in these respects. It is also of note that the right to love (a measure of the patients' contact with family and friends) showed no significant improvements following transfer with its anticipated ease of visiting. Results also showed that the right to occupation was less well met after the move than in hospital.

Physical health

Figure 4 shows the average number of reported physical health symptoms and their perceived severity while in hospital (pre-move) and in the patients' receiving environments (post-move). Results indicated statistically significant increases in both symptom number and severity following transfer. In view of the average age of this group of patients (64 years at transfer) and the length of time over which this study was conducted (up to 5 years), it is possible that these increases reflected an expected deterioration over time. The nature of the physical health symptomatology reported by nursing staff did not change after transfer. Symptoms typically included: breathlessness/coughs/colds (many patients were heavy smokers), skin conditions, orthopaedic/rheumatic aches and pains and short-term memory impoverishment/confusion.

Activities checklist

Figure 5 shows differences in the average range and frequency of activities entered into in hospital (pre-move) and after transfer (post-move). Results showed a statistically significant decline in both aspects of social activity, and this was in keeping with the earlier finding that the right to occupation was less well met. On site and commonly used by many patients in the hospital setting were a wide range of activities including a library, a canteen, extensive grounds and gardens, social and recreation department, hairdressing salon and domestic tasks. In addition, there were opportunities for a few patients to participate in the running of the site, e.g. by working in the laundry or the kitchens. In their new environments activities were less readily available, although many patients were, at the time of the study, regularly engaged in shopping and domestic duties. Despite their proximity to community facilities, many patients were debarred from these due to lack of financial resources, an inability to use them independently, a lack of accompanying staff or, in some cases, a perceived unwelcomeness.

Discussion

This paper summarises longitudinal data based on repeat assessments of the behavioural functioning of 90 patients over a period of 4–5 years. This time period spanned the closure of this district’s psychiatric hospital and the subsequent transfer and resettlement of patients in various alternative settings. Longitudinal data of this intensity have the advantage of allowing for the study of both individual and group changes over time, appropriately reflecting the dynamic process of the transfer and resettlement process.

In terms of general behaviour, these findings showed that there was no significant change for the majority of patients. In view of the group's high average age and length of stay, in addition to their high levels of disability and disturbance, it was anticipated that the transfer would lead to increased behavioural problems. However, results showed that there were deleterious behavioural consequences for only a minority of individuals and further, that for marginally more individuals there were significant improvements. It is of note that improvements within the REHAB group were sufficient to merit a significant improvement in total GB for the group as a whole. In addition, there was a significant overall increase in DB. Levels of deterioration remained about the same (12%) in both groups; however, it is suggested that the more dependent (REHAB GB) fell within the “deteriorated” group.

Supplementary findings showed that the move had consequences for the day-to-day lives of most patients. For the majority of patients – particularly those transferred to bungalow complexes – there was a demonstrably significant improvement in the overall quality of care provided. For many, this meant such differences as sleeping in...
a private room as opposed to a dormitory, participating in choosing personalised rather than institutionalised fixtures and fittings, living within walking distance of, rather than a bus ride to, town and living in domestic-style settings rather than in a hospital. It was anticipated that an increased proximity to the place of origin would facilitate contact with friends and family in the community. It is of note that there was no significant change in this regard.

In one important respect the quality of care significantly deteriorated following transfer, i.e. the right to occupation. Results showed that access to social and recreational activities was reduced, and this finding was corroborated by an independent activity checklist completed at intervals before and after transfer. One clear advantage of a large hospital is that such activities are freely available on site. It remains a source of some concern that in their new settings recreational, vocational and diversional activities remained limited for this group of patients. Results also indicated a significant increase in the number of physical health problems and their severity. This finding may not be unexpected, given the frailty and increasing age of this group of patients.

The closure of large psychiatric hospitals in favour of community-based care has been one of the most radical changes in mental health care provision for several decades, and its impact on the patients concerned is yet to be fully understood. This study found few casualties of the process, despite the fact that this group of patients may be seen to be particularly vulnerable to stressful life events. It may well be that future research should usefully focus on patient’s defence mechanisms or coping strategies. This study also highlighted a deficiency in the levels of social, recreational and occupational activities available to patients after transfer to community settings. It will be of interest to see whether these findings reflect similar processes elsewhere in the country or whether they are particular to this health setting.

Acknowledgements The author is grateful to many different staff members at various settings across this health district who offered a sustained commitment and effort to this project over several years.

References
The run-down and closure of a psychiatric hospital

Effects on patients' behaviour

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Summary. The run-down and closure of psychiatric hospitals can be stressful for both staff and patients. Interviews with approximately 50% of over 100 long-stay psychiatric patients during an 18 month period preceding a hospital closure show them to be generally ill-informed as to reasons for closure and future plans for their care. However, repeat measures of behavioural functioning (CAPE and REHAB) during this running-down period show no significant changes in patients' behaviour.

“...There they stand, majestic, imperious, brooded over by the gigantic water tower and chimney combined, rising unmistakable and daunting out of the countryside the asylums which our fore-fathers built with such solidity. Do not for a moment underestimate their power of resistance to our assault...” (Powell 1961).

However since the then Minister of Health's pessimism, concerns about conditions in long-stay psychiatric hospitals coupled with a political principle of reduced public expenditure have converged to undermine resistances to deinstitutionalisation, (Jones 1988). Resident populations in English psychiatric hospitals were reduced by over 50% during 1960 to 1985 (Jones 1988), and large hospitals are being run down and closed. The effects of proposed closures upon hospital staff are beginning to be investigated (Hicks 1980; Dencker 1989). Staff can be stressed by the major social changes involved, and have in some instances campaigned successfully to halt closures, (Management Rounds 1982). However the effects of proposed hospital closures upon patients are less well documented, and restricted to studies of patients' attitudes to discharge (Wing and Brown 1970; Abrahamson and Brenner 1982; Abrahamson et al. 1989). This is a curious omission, particularly at a time when consumers of services might be expected to be participating in the planning process. Furthermore, even routine inter-hospital transfers of psychiatric patients have been recorded as presenting a crisis for both patients and their families. Deleterious symptoms and reactions during this time have been noted and termed the “transfer syndrome” (Shugar et al. 1986). Hospital closures however may be more stressful than routine patient transfer. Factors such as low staff morale, high staff turnover and absenteeism, movements of patients between hospital wards with subsequent disruptions to social groupings, uncertainties regarding the future, and the physical deterioration of premises may all take their toll on patients' welfare, as well as undermining the continuity and the quality of care provided. Such concerns have led some clinicians to anticipate behavioural deterioration during this transitional phase. However, research into the behavioural effects of the run-down of a psychiatric hospital on its patients has so far been neglected.

The decision to close Saxondale Hospital in Nottinghamshire by the end of 1988 was taken in 1985. Of the remaining 550 or so patients, about one-third originated from the Central Nottinghamshire Health District, where they were to be relocated in either purpose-built bungalow complexes or in other hospital wards. As part of a larger scale project to evaluate the effects of transferring patients from a long stay psychiatric hospital to various community settings, baseline information was gathered during the hospital's final 18 months, and is presented here to document the effects of running down a psychiatric hospital on the behaviour of patients.

Subjects

This hospital provided services to two adjoining Health Districts. Upon its closure, most patients were to be relocated in their district of origin. This study concerns the 111 patients who were to be relocated to one of the two Dis-

Table 1. Patient details

| Total n = 111 (Female = 54, Male = 57) | Mean age = 66 years (Range 20–94 years) | Mean length of stay since last hospital admission = 20 years (Range 1 month – 58 years) | Major diagnosis: 62% schizophrenia, 13% depression, 11% dementia, 14% other |
| Nearly half (45%) have a significant physical disorder (physical/sensory/neurological handicap; diabetes; epilepsy). |
tricts. No data are currently available to assess their comparability to the group of patients allocated to the neighboring district. However, since referral and treatment practices were similar across these Districts, it is likely that this group is representative of the total patient population of that time. Their characteristics are summarised in Table 1.

Method

All 111 patients who were to be relocated in this health district were assessed at regular intervals for approximately 18 months prior to the hospital closure, using either the CAPE (Pattie and Gilleard 1979) or REHAB (Baker and Hall 1983), depending on their age.

REHAB is a behaviour rating scale designed to assess people with a major psychiatric handicap. Its single most important score is Total General Behaviour (GB), which comprises 5 factors: Social Activity, Speech Skills, Disturbed Speech, Self Care and Community Skills. In addition, REHAB measures deviant behaviour (DB). GB scores can be classified according to three levels of handicap; discharge potential (0-40), moderate handicap (41-65) and severe handicap (66+). Inter-rater reliability of this scale has been shown to be satisfactory (Carson et al. 1988). 62 patients (29 female and 33 male; mean age, 58 years; mean length of stay, 15 years) were assessed on an average of 9 occasions (range 4-12) at intervals of two to three months using this scale.

The CAPE consists of two independent measures of cognitive (CAS) and behavioral (BRS) disability, and is designed for use with the elderly. Scores are graded from A–E, representing a continuum of levels of functional impairment and dependency. Grade A represents no mental impairment and independent living, and grade E represents the severely impaired, maximum dependency group. 49 patients (25 female and 24 male; mean age, 74 years; mean length of stay, 25 years) were assessed using this scale on an average of six occasions (range 2–8) at intervals of three to four months prior to the hospital closure. In addition, 52 (46%) patients both agreed to and complied with a brief semi-structured interview designed to elicit basic knowledge, hopes and fears regarding closure and its aftermath. Interviews took place between four and eight months prior to the hospital finally closing.

Results

Interview (n=51)

Findings indicate considerable gaps in the patients' knowledge of closure and relocation plans. Nearly half (44%) did not know why the hospital was being closed. Of the remainder, most (19%) reported that financial constraints had forced the closure. Only 6% replied that the hospital was being replaced by community-based care.

In addition, only a third (35%) correctly knew of plans for their future, the others being either unsure (29%) or incorrect (31%) as to proposed future care.

However, when advised of plans for the future, nearly two-thirds (60%) described themselves as looking forward to their new home. 28% expressed considerable reservations, while the remainder (12%) had no comment.

Some (23%) cited proximity to place of origin, to relatives (23%), and to the shops (8%) as positive aspects of the new home. Others (8%) looked forward to increased privacy. However, over one third (38%) were unable to see anything positive about the move.

A similar number (39%) reported nothing negative about the move, whereas some (17%) reported generalized uncertainties.

"You've got to worry haven't you ...". "It'll take some getting used to ... how to settle down? ...".

"I haven't experienced it ... I shall get a chair and stay in my bedroom ...".

Others were more specific, and noted difficulties in adjusting to the absence of particular people (8%) or aspects of the hospital premises (15%).

When specifically asked what aspects they would miss most about the hospital, almost equal mention was made of people (combined staff and patients – 52%) and hospital facilities (54%).

Only a third commented on aspects of the hospital that they would be glad to leave behind: other patients were rated by 14%, staff by 4%, and aspects of the hospital premises by 14%.

Behaviour ratings

Figures 1 and 2 show little overall change in average levels of behavioural and cognitive functioning during the 18 months prior to the hospital closure. REHAB (GB) scores fell on all but one occasion within the moderate handicap range. CAPE cognitive scales fell within the high dependency range on all but one occasion, and the CAPE behaviour rating scale scores consistently fell within the high dependency range.

In order to assess whether this average zero effect masks clinically significant individual variation, the mean handicap band (REHAB) or dependency grade (CAPE) representing the first and second halves of all scores for each patient were computed and compared.

Table 2 shows the percentage of patients for whom average scores move from one handicap band or dependency grade to another prior to hospital closure.

![Fig. 1. Showing average REHAB GB scores during 18 months preceding hospital closure (n = 62)](image-url)
Results show that most patients' scores remain within the same clinical level over time, and that, of those who change, approximately the same overall number improve as deteriorate. It is of note that more than twice as many of the elderly, longer-stay group (i.e. those measured with CAPE) deteriorate as improve, whilst this is reversed for the younger group (i.e. those measured on the REHAB scale).

**Discussion**

Despite being generally ill-informed both as to reasons for the closure policy and the plans for their future care, the results indicate that behavioural deterioration amongst patients during the run-down of the psychiatric hospital did not occur. No overall change in patients' behaviour or cognitive functioning as assessed by the CAPE and REHAB scale is in evidence from this study. Some individual changes occurred, but these were as often in the positive as in the negative direction, indicating that there are mediating factors serving to maintain behaviour in the face of uncertainty.

Even on cursory interview most patients were able to express both positive and negative views of the plans for their future care. This balance of positive expectations, uncertainties and an awareness of losses to be incurred suggests the beginnings of a sensitive and realistic appreciation of the issues involved. This bodes well for those who wish to involve long-stay patients in the planning process, suggesting that, with more time and provision of information, about one-half of patients have both the capacity and a willingness to enter into the debate. This conclusion is in keeping with findings from other studies (Abrahamson and Brenner 1982; Abrahamson et al. 1989).

Findings reported here anticipate a more detailed investigation of psychosocial effects of relocating long-stay institutionalised psychiatric patients, a focus extensively documented in this country and elsewhere (Thornicroft and Bebbington 1989). However, scant attention has so far been paid to the effects of the running-down period, rather than the aftermath of the closure. This interim period may in some cases last several years and may well be a stressful period for staff; its effects on patients must also be worthy of our investigation. This report suggests that despite uncertainties about their future and awareness of approaching losses gross behaviour changes do not occur during this time. Patients are not passive recipients of environmental stress, but are clearly coping with or defending against perceived threats in a way that leaves levels of behavioural functioning intact. Future researchers interested in easing the potentially stressful running down period might usefully focus on patients' perceptions and coping strategies, rather than on their manifest behaviours.

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**References**


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