The quality of residential and nursing-home care for people with dementia

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Abstract

Objectives: to determine the environmental quality of community-based residential and nursing care for people with dementia.

Design: survey of a stratified random sample of care homes.

Settings: forty-six registered residential and nursing homes in a single health district.

Main outcome measures: scales for the assessment of environments for people with dementia, including care practices, social activities, social facilities, reality orientation cues, physical condition and space availability.

Results: over 90% of the homes had high quality scores on at least two measures. Provision of reality orientation cues was usually poor. Nursing homes catering specifically for ‘the elderly mentally infirm’ had more restrictive care practices, whilst local-authority residential homes had a better provision of recreational facilities. Private sector homes were in much better condition than public sector homes but their care practices were more institutional—this may be related to the provision of nursing and elderly mentally infirm care almost exclusively by the private sector.

Conclusions: the environmental quality of community-based residential care is generally good, but improvements could be made, particularly with reality orientation cues.

Keywords: dementia, environment, quality of care, residential care

Introduction

Concerns about patients’ welfare in the latter half of the 20th century followed from disquiet about the conditions described in asylums [1, 2]. Similar observations have been made on elderly patients who live long-term in hospitals and residential homes [3–6]. The quality of care provided for elderly people, and especially those with dementia, remains a concern. People with dementia living in institutions “are unlikely to complain. . .and are unlikely to be heard if they do” [7]. This is partly a result of the nature and effects of their illnesses, and partly a result of societal attitudes.

In the United Kingdom, there have been marked changes to the settings in which older patients receive care, with a gradual move from long-stay hospitals into various types of care homes. Some of these are run by charities or local authorities, but most are privately run residential homes [8]. As a result of the increased demand for care, most homes have many demented residents. In addition, many homes now cater specifically for the ‘elderly mentally infirm’ (termed EMI homes), and provide more specialized care for those with dementia.

Surveys of quality in institutional care have been carried out in hospitals and in residential homes. Willcocks et al. [9] surveyed 100 residential homes for elderly people and found that larger homes had more amenities and that the residents of these homes were better adjusted, although they were less satisfied with the staff. In a previous study of 28 long-stay psycho-geriatric wards [10] we applied a number of rating scales specifically designed to assess environments for people with dementia [11]. Of the five aspects of the environment assessed, two-thirds of the wards achieved high quality on one aspect, but only two reached this standard on at least three aspects. Four wards were assigned at least three low quality scores.

The intention of the present study was to replicate our previous survey in the non-hospital sector. As this was the first use of the scales in care homes, we used the opportunity to test their usefulness in this setting.
Methods

We considered all care homes in Leeds health district that might provide long-term care for people with dementia. We excluded homes registered principally for those who had learning disabilities or people with chronic psychosis, and homes with <10 residents. We then categorized each of the remaining homes into: (i) private residential, (ii) local-authority residential, (iii) EMI residential, (iv) EMI nursing and (v) general nursing.

EMI residential homes were a mixture of private and local-authority provision, while nursing homes were all privately run.

We chose 10 homes at random from each category, except for EMI residential homes: since there were only six of these we included them all. The 46 homes together provided care for more than 1400 elderly residents, and ranged in size from 12 to 60 residents. The local authority ran 13 homes (10 residential homes and three EMI residential homes). The rest were run privately.

We contacted the homes by telephone, and then provided them with a detailed information sheet before obtaining consent. No home refused access. The data were collected over 6 months by one researcher (P.T.).

We assessed the environmental quality of each home using the Rating Scales for the Assessment of Environments for the Confused Elderly [11]. These comprise six scales covering five aspects of the environment—care practices, social/recreational resources (facilities and organized activities), reality orientation cues, physical condition and space availability (Table 1). Criterion validity against assessments made by experts gave correlations between 0.51 and 0.88. Inter-rater reliability of the scales ($\kappa$) ranged from 0.51 to 0.93; test–retest reliability from 0.61 to 0.69. Definitions for high and low quality on each scale were the same as those used by Mountain and Bowie [10], see Table 1.

We obtained approval for the study from the Leeds research ethics committee.

Data analysis

We analysed the data using SPSS for Windows, version 6.1 [12]. The rating scale scores are ordinal data and were not normally distributed. Therefore, analysis was carried out using non-parametric statistics. We assessed variance between facilities using Kruskal–Wallis one-way analysis of variance with a multiple comparison procedure to identify significant differences [13]. We made other comparisons using the Mann–Whitney $U$ test.

Results

We found high levels of overall quality across the range of community facilities, but universally poor quality of reality orientation cues (Table 2).

Only one home failed to obtain a high quality score on any measure, while more than half of the homes had high quality scores on at least three scales. Three homes (6% of the sample) obtained only one high quality score, 17 (37%) had two high quality scores, 16 (35%) had three, eight (17%) had four, and one (2%) scored in the high quality range on five out of the six rating scales. In contrast, every home had at least one area in which they scored poorly (usually reality orientation cues), while three homes (6%) had two low quality scores. No home scored poorly on more than two areas.

For each category of home, we ascertained the median score on each scale (Table 3).

Analysis of variance revealed significant differences in care practices: EMI nursing homes were more institution-orientated than private or local-authority residential homes. Local-authority residential homes provided significantly more recreational facilities than EMI nursing homes.

We had anticipated that environmental differences would be associated with other variables: private or local-authority ownership, and whether the residents had high dependency (nursing homes) or had special needs (EMI). We carried out analyses using the Mann–Whitney $U$ test to explore these hypotheses.

<table>
<thead>
<tr>
<th>Table 1. Scales used and their definitions of high and low quality</th>
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<tbody>
<tr>
<td><strong>Care practices (restrictiveness)</strong></td>
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<tr>
<td><strong>Activities available</strong></td>
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<tr>
<td><strong>Facilities available</strong></td>
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<tr>
<td><strong>Reality orientation cues</strong></td>
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<tr>
<td><strong>Condition</strong></td>
</tr>
<tr>
<td><strong>Space availability</strong></td>
</tr>
</tbody>
</table>
We found that the private sector homes were in significantly better physical condition ($z = 2.35$, $P = 0.02$), while the public sector homes provided significantly more recreational facilities to their residents ($z = 2.08$, $P = 0.04$). The private homes also had regimes which were significantly more institution-orientated than the public sector ($z = 2.05$, $P = 0.04$).

We found that EMI homes were less resident-orientated ($z = 4.01$, $P < 0.001$) and provided fewer recreational facilities ($z = 2.61$, $P = 0.01$) than non-EMI homes. There were no other significant differences.

Finally, we found that residential homes were significantly more resident-orientated than nursing homes ($z = 3.68$, $P < 0.001$). There were no significant differences between residential and nursing care on any of the other scales.

Discussion

This study adds to our knowledge of the quality of the environment in residential homes. It points to strengths and shortcomings in these facilities.

We found that the private sector homes were in significantly better physical condition ($z = -2.35$, $P = 0.02$), while the public sector homes provided significantly more recreational facilities to their residents ($z = -2.08$, $P = 0.04$). The private homes also had regimes which were significantly more institution-orientated than the public sector ($z = -2.05$, $P = 0.04$).

We found that EMI homes were less resident-orientated ($z = -4.01$, $P < 0.001$) and provided fewer recreational facilities ($z = -2.61$, $P = 0.01$) than non-EMI homes. There were no other significant differences.

Finally, we found that residential homes were significantly more resident-orientated than nursing homes ($z = -3.68$, $P < 0.001$). There were no significant differences between residential and nursing care on any of the other scales.

### Table 2. Environmental quality in community settings for dementia

<table>
<thead>
<tr>
<th>Quality</th>
<th>Care practices</th>
<th>Activities available</th>
<th>Facilities available</th>
<th>Reality orientation cues</th>
<th>Condition</th>
<th>Space availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>44 (96)</td>
<td>2 (4)</td>
<td>20 (44)</td>
<td>0</td>
<td>23 (50)</td>
<td>72 (33)</td>
</tr>
<tr>
<td>Medium</td>
<td>2 (4)</td>
<td>43 (94)</td>
<td>26 (56)</td>
<td>1 (2)</td>
<td>23 (50)</td>
<td>10 (22)</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>1 (2)</td>
<td>0</td>
<td>45 (98)</td>
<td>0</td>
<td>3 (6)</td>
</tr>
</tbody>
</table>

### Table 3. Median quality scores for each category of home

<table>
<thead>
<tr>
<th>Home category</th>
<th>Median score</th>
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<tbody>
<tr>
<td></td>
<td>Care practices</td>
</tr>
<tr>
<td>Private residential</td>
<td>64</td>
</tr>
<tr>
<td>Local-authority residential</td>
<td>65</td>
</tr>
<tr>
<td>‘Elderly mentally infirm’ residential</td>
<td>57</td>
</tr>
<tr>
<td>‘Elderly mentally infirm’ nursing</td>
<td>55</td>
</tr>
<tr>
<td>General nursing</td>
<td>58</td>
</tr>
</tbody>
</table>

Overall, the quality of homes was good. A few homes were cramped but most were relatively spacious. Similarly, the physical condition, care practices and social/recreational facilities and activities were of either moderate or high quality. In stark contrast, no home provided reality orientation cues that were of even moderate quality.

The more institution-orientated regimes found in EMI nursing homes may in part reflect increased risks related to the degree of disability and dependency in the residents. Staff are in the difficult position of having to balance a desire to allow residents maximum freedom, while having a legal duty of care for their safety. However, it may be possible to run a unit, even one that provides care to very disturbed people with dementia, with the philosophy that a patient’s physical needs do not necessarily take precedence over their psychological needs [14].

The better recreational facilities found in local-authority residential homes may reflect a trend for the local authority to have a more generous provision. Alternatively, the greater disability of the residents of
EMI nursing homes may tempt staff to neglect this area. However, as facilities in both general nursing homes and EMI residential homes were relatively good, it seems unlikely that physical dependency or disturbed behaviour alone account for the finding—although the combined effect may be important.

We had anticipated that there would be differences between specific types of provision. As expected, the physical condition of private homes was better than in the public sector. The private sector seemed to place a greater emphasis on the appearance of the home, perhaps because appearance gives an important immediate impression to prospective purchasers of the service. Money for the maintenance of décor appears scarcer in the public sector, but it may be that some of the money not spent on decoration and maintenance is used to provide more recreational facilities.

We had not expected private homes to be less resident-orientated in their policies. However, the larger proportion of EMI homes in the private sector probably accounts for this finding.

We did not explore other factors, such as the size of the home (number of residents) or whether some homes had a single-sex admission policy. These and other factors may have an influence on some aspects of environmental quality.

What are the implications for practice? Our findings indicate that improvements can be made, most of which would cost very little. The quality of reality orientation cues could easily be improved; this might be associated with improvement in residents' behaviour, such as wandering into the wrong room. The homes still have much to do to maximize the degree to which the environment supports their elderly residents' diminished competence. For instance, time disorientation could not have been helped by the lack of clocks, or clocks that were inaccurate or small.

On a positive note, given that 94% of homes were highly resident- rather than institution-orientated, homes have generally implemented the guidelines about more flexible patterns of care, respect for individuals and the principle of informed choice [15, 16]. These findings are considerably better than previous findings within the National Health Service (median scale scores—care practices, 39; activities available, 21; facilities, 20; reality orientation cues, 6.9; condition, 10.9; and space availability, 46) [10]. Studies are required to examine the quality of today's National Health Service provision and directly to compare hospital and non-hospital provision.

We have not found any aspect of environmental quality that was superior in the specialist (EMI) homes compared with the others. It is possible that the quality features of specialist provision were not captured by the study. Further studies are needed to explore care in specialist homes and to identify factors that contribute to the quality of life for the residents.

### Key points
- There are differences in environmental quality between different categories of home and between different providers.
- Reality orientation cues are very poorly provided in all types of home.
- The care practices in ‘elderly mentally infirm’ nursing homes are more institutional than in other homes.
- Privately run homes are in better physical condition than local-authority homes.
- Improvements could be made without significant cost implications.

### References

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