ORIGINAL ARTICLE

The needs and mental health of older people in 24-hour care residential placements

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Abstract
At present one in five men and one in three women who reach the age of 65 in the UK today can expect to require 24-hour residential care. They are assessed according to needs as to the type of placement that is required. Little is known about the changing needs and symptoms of residential clients over 65 with mental health problems. The needs and neuropsychiatric symptoms of older people living in residential, nursing and hospital settings were assessed by standardized questionnaire. Seventy-seven residents were interviewed using the Camberwell Assessment of Needs for the Elderly (CANE) and the Neuropsychiatric Inventory (NPI). The mean CANE for all settings was high. The highest mean CANE was for a residential home and the lowest for a hospital setting. Similar settings had varying NPI and CANE. The data suggests that once placed, subjects needs and neuropsychiatric symptoms do not remain static. It may make both clinical and fiscal sense to reassess subjects. The development of more residential settings, which allow flexibility of degree of care, is recommended.

Introduction
Until the twentieth century most people did not expect to reach the current retirement age. By the end of it, however, there were four times the numbers of people aged over 65 years compared to their counterparts at the beginning of the century. The population is continuing to age and in particular the number of people aged over 80 years is now increasing. While the implications of this are in the main positive, as people survive longer they are more likely to suffer from age-related illnesses, which are often chronic and associated with physical and mental disability. At present, one in five men and one in three women who reach the age of 65 in the UK today can therefore expect to require 24-hour residential care (Heath, 2000). This not only has immense implications for the individual concerned but also has significant consequences for the remainder of society.

In the UK, the total budget for domiciliary and institutional long-term care was £11065 million (at 1995/6 prices) of which more than 75% was spent on institutional care. There were 482 250 people in institutions of whom about 60% were in residential care (Part III), about a third in nursing homes and 7% in hospital (Royal Commission on Long Term Care, 1999). The cost of care in these different settings varies, because they are designed to meet differing needs and are staffed accordingly. About half of the cost was accounted for by residential care, a third by nursing homes and 17% by long-stay hospitals (Royal Commission on Long Term Care 1999—calculations derived from figures).

Mental illness is one of the commonest reasons for 24-hour care being required (Heath, 2000). The mental health services for older people are being prioritised, with a requirement for NHS Trusts, Health Authorities and Local Authorities to agree joint investment plans (Department of Health, 1997). The House of Commons Health Select Committee (1996) commented on there being no national information on the characteristics of older people in institutional long-term care. Similarly, we were unable to find any published studies regarding the needs of older people with mental health problems living in 24-hour care settings.

The definition of needs used in this study is that of the National Health Service and Community Care Act 1990. It defines a need as “the requirements of individuals to enable them to achieve, maintain or restore an acceptable level of social independence or quality of life” (Department of Health Social Services Inspectorate, 1991). As in the above definition we have not subdivided need into met or unmet need. The
current medical literature has many other definitions of need ranging from subjective expressions of want or desire (Tracy, 1986) to requirements for specific activities or interventions that have the potential to ameliorate disabling symptoms or reactions (Brewin, 1992). We have not used the former definition as desire varies widely between individuals and depending among other things, on their knowledge of possibilities and their judgement as to what they can ask. The latter definition classifies needs as present only if there is a possibility of improving the symptoms and therefore implicitly excludes needs that require intervention to remain static.

Recent reports regarding the needs of those in residential care, in particular, the recent National Report on Mental Health Services for Older People (Audit Commission, 2000) highlighted problems in caring for older people with dementia in residential homes. Many residents have high levels of dependency, up to 80% of people are on antipsychotic drugs and up to 60% are on anxiolytics or hypnotics. The needs of residents in continuing care settings have increased in recent years (Darton, 1998; Crawford, Berringer & Stout, 1999). Older people in continuing care often have complex needs because mental health problems often coexist with disability, physical illness and social problems. Resident's health needs therefore require a comprehensive and systematic assessment.

The Medical Research Council topic review on the health of the UK’s elderly people (MRC, 1994) recommends that in future “research in community care should be focused on areas of particular relevance to the changes in care within the community notably, needs based approaches”. While most social and health services have strictly defined needs led criteria for placement; they do not provide subsequent routine reassessment. Over time people may either deteriorate or improve or have an altered pattern of symptoms. We carried out the study described below with the aim of identifying the needs and neuropsychiatric symptoms of residents in different settings and used these results to comment on whether the residents were living in an appropriate setting at the time of the study.

**Methods**

This study took place in Camden and Islington; two relatively deprived inner London boroughs with a total population of over one third of a million people. The subjects were people aged 65 and over living in: (1) two hospitals with a total of three different long-stay mental health care of older people (MHCP) wards; (2) two specialized MHCP nursing homes, with everyone living on one floor; or (3) two social services residential care homes.

Either all residents in one hospital ward or nursing home floor were assessed, or in one hospital and in both residential care home, the manager was asked: “To pick a representative sample of residents”.

**Procedure**

MF carried out all interviews in the participants’ homes during April 2000. Training for the Camberwell Assessment of Needs for the Elderly (CANE) involved using the CAN manual (Phelan et al., 1995) and discussion of the method of administration with a psychiatrist experienced in the use of the CANE.

**Instruments**

Both instruments used (see details below) have been formally tested and found to have appropriate psychometric properties in this population.

**The Camberwell Assessment of Needs for the Elderly** (CANE; Reynolds et al., 2000). Older people with psychiatric illnesses have the same basic needs as everyone else. The CANE is designed to measure general needs (e.g. shelter and food) and psychiatric needs (e.g. psychological distress and deliberate self-harm) as opposed to only needs arising from psychopathology. This instrument is based on the structural model of the Camberwell Assessment of Need (Phelan et al., 1995). The CANE measures the number of needs in individuals with mental disorder according to patient, carer and staff report. Need can be divided into met and unmet. We used the 24-item CANE, which does not include the domains covering carers.

For this study we used the CANE to consider total needs, rather than whether these were met or unmet. The needs were scored as 0 = no problem or 1 = need (either met or unmet). Higher scores therefore indicate higher needs. Possible scores range between 0 and 24. We did not differentiate between needs which were met or unmet because the placements were designed to meet needs. Scoring needs only if unmet would, therefore, not tell us about the requirements in terms of the needs of the individuals. We used senior staff as informants to enable MF to complete the CANE, as all residents were living in 24-hour staffed accommodation and most were not able to answer questions for themselves.

The needs assessment covered the following items: accommodation, looking after the home, food, self-care, caring for someone else, daytime activities, memory, eyesight/hearing, mobility, continence, physical health, drugs, psychotic symptoms, psychological distress, information, safety (deliberate self-harm), safety (indirect self-harm; safety (abuse/neglect), behaviour, alcohol, company, intimate relationships, money and benefits. There are no published expected scale scores for people in
The needs and mental health of older people

different diagnostic categories or at different stages of illness.

The Neuropsychiatric Inventory (NPI). The NPI (Cummings et al., 1994) scores frequency and severity of a range of non-cognitive psychiatric symptoms e.g. hallucinations, aggression, depression. There are fourteen symptom areas covered. Possible scores range from 0–144. Higher scores indicate increased severity. Cummings and his colleagues (1994) tested a 10-item version of this instrument in a control population (older people without psychopathology) and in people with dementia attending outpatients. The mean scores were respectively 0.43 and 8.25.

An additional question was asked: “Does the patient have any specific needs in regard to gender, religion, culture or sexual orientation?”

Analysis

We calculated the mean, standard deviation and range for NPI and CANE in each setting. T-tests for independent samples were used to explore significant differences between mean scores for settings of the same type and between the different types of setting; 95% confidence intervals of the difference were calculated for any significant differences.

Results

Schedules for 77 participants were completed. Age range was 65–98. There were 46 (58%) females. Table 1 below shows for each type of setting, the number of people interviewed, the number (and percentage interviewed) of people resident at the time of interview, the mean score, standard deviation and the range of scores on the NPI and the CANE. It also indicates the number (and percentage) of people in each setting who had either no or very infrequent and mild non-cognitive psychiatric symptoms (total score ≤ 2). The mean score on the NPI was significantly different between the two social services residences (mean NPI respectively 6 and 20; p = 0.001; mean difference 14.0, 95% confidence 6.2–21.8). There was no other significant difference between mean scores for either the NPI or the CANE in any setting. Very few special needs were identified. Three people required and were receiving African/Caribbean food some of the time. All religious denominations provided the appropriate input to residents in each setting. No one identified specific needs because of gender or sexuality.

Discussion

This is the first study to report on the needs and mental health symptoms of people living in long-term residential settings. Our main findings relate to the needs and neuropsychiatric symptoms found in different settings. The mean number of needs (CANE score) was uniform but there was variation in the number and severity of neuropsychiatric symptoms (NPI score). Eligibility criteria are designed to ensure that only those with needs that cannot be addressed in other settings are admitted to residential facilities and the uniformity of CANE scores suggest that process is, in general, working.

The mean total scores in the CANE were similar between settings. This is despite the fact that these varying facilities are set up with the intent of providing for different groups with differing levels of needs. Those in the social services residential care homes are expected to be the least needy and are funded at a lower level. Nevertheless, while the highest (18) and the lowest (3) total on the CANE were for a long-stay hospital setting; the highest mean CANE score was in a residential home.

The NPI scores showed a small variation between types of settings with the mean varying from 10.4 to 13.7. Unexpectedly, the highest mean NPI score in individual facilities was in a residential home as was the lowest (20 and 6 respectively). Overall, the mean scores of both instruments showed unforeseen differences between similar settings, which, in theory, provide for the same client group. One residential home, in particular was providing for residents who

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>CANE mean (range; SD)</th>
<th>NPI mean (range; SD)</th>
<th>Number of people with NPI ≤ 2 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Long-stay wards</td>
<td>13.5 (3–18; 3.0)</td>
<td>10.4 (0–47; 10.3)</td>
<td>10 (27.7)</td>
</tr>
<tr>
<td>n = 36 (52; 69.2%)</td>
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</tr>
<tr>
<td>(2) MHCOP nursing homes</td>
<td>14.4 (10–17; 2.0)</td>
<td>13.7 (0–48; 13.8)</td>
<td>5 (23.8)</td>
</tr>
<tr>
<td>n = 21 (44; 47.7%)</td>
<td></td>
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</tr>
<tr>
<td>(3) Residential care</td>
<td>14.6 (11–17; 1.7)</td>
<td>13.1 (1–41; 10.8)</td>
<td>2 (10.0)</td>
</tr>
<tr>
<td>n = 20 (69; 29.0%)</td>
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(1) Hospital long-stay wards; (2) specialized mental health care of older people nursing homes; (3) social services residential care homes. NPI = neuropsychiatric index. CANE = Camberwell Assessment of Needs for the Elderly.
appeared to be as needy in psychiatric terms as those in hospital settings.

CANE functions as an index of total needs in this population, as well as identifying what these needs are. It is designed to identify a broad spectrum of need, including, for example, the provision of accommodation and food. If people are appropriately placed in settings, which offer residential 24-hour care, then everybody in these settings should score on these items regardless of specific psychopathological needs. Thus, there was a uniform picture of people scoring as having some needs on the CANE. Those with very low scores may not have needed residential care. There are four items, namely psychotic symptoms, deliberate self-harm, psychological distress and behaviour (out of 24), which are directly measuring non-cognitive psychiatric symptoms. People are usually placed in psychiatric nursing homes and long-stay hospital psychiatric wards because of these symptoms and the consequent need for psychiatric care. Conversely, people with similar needs apart from neuropsychiatric symptoms may be cared for in the general nursing or hospital counterpart.

In contrast, the NPI does not measure total needs but was devised to measure psychopathology qualitatively and quantitatively and therefore is a complimentary instrument for specifically psychiatric needs, as opposed to total care needs.

We considered the number of people with mild or infrequent non-cognitive symptoms in each setting (NPI ≤ 2). In social services residential care, many residents would be expected to fit into this description. In MHCOP nursing homes and hospitals this measure could be regarded as a proxy measure for people who may not be living in the appropriate setting. The total number was 15 out of possible 59 (25.4%) residents in the sample from hospital and nursing homes (as opposed to social services residential care homes). As people are placed in such units after going through panels with stringent eligibility guidelines, we are making the assumption that they were placed appropriately, although as this is a cross-sectional survey we do not have the data about this. This indicates that their symptoms and therefore needs have not remained static. These placements have been regarded as lifelong care for people who are not expected to improve symptomatically. These placements may be acting as therapeutic settings and also people’s behaviours may reduce as the dementia progresses. In contrast many people in the social services residential care homes have high NPI scores and their needs have probably increased with time so that they may now be inappropriately placed.

A psychiatrist used appropriate instruments and interviewed one informant in each setting. He clarified terms and tried to ensure that the information was as accurate as possible. Nevertheless the different informants may have had varying thresholds in reporting needs and symptoms. In addition, not all residents in these settings were evaluated and there was no randomization process, so the results may not be completely representative of the residents in each setting. However, an attempt to assess a representative sample of residents was made and we do not think there was systematic bias in those interviewed. Despite these reservations, we now have for the first time good quality and detailed information on older people in these types of residential placements, and we hope that this can broadly be taken to represent data on older people in residential placements in similar areas.

Conclusions

We recommend that these findings be used to inform the philosophy of “home for life” in separate MHCOP nursing and hospital settings. If these settings have a rehabilitative function then reassessment would seem appropriate. This is consistent with the philosophy of acknowledging and fostering independence, and where possible balancing this need for stability in what is essentially the person’s home. Movement out of a hospital setting into the community may be beneficial to the individuals concerned. One study of older people with mental health problems discharged from long-stay hospital settings to other residential homes found that the new setting was livelier and psychologically pleasing and that they had no decrease in quality of life (Knapp et al., 1994). It was also cheaper. Thus a therapeutic advantage may also make fiscal sense, despite the requirement for extra staffing for this reassessment process. One way forward which may enable people to receive the appropriate care while maintaining as much stability as possible, is the development of more residential settings which are joint social and health ventures and allow flexibility of degree of care according to residents needs.

Acknowledgements

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References


