Ageing and Society **21**, 2001, 71–93. Printed in the United Kingdom

Mental health in residential homes: a role for care staff

SALLIE MOXON*, KENNETH LYNE*, IAN SINCLAIR†, PHILIP YOUNG** and CHRISTINE KIRK*

ABSTRACT
Two linked studies assess the feasibility of involving care staff in reducing the prevalence of depression in homes for older people. Mental health training was provided for care staff, delivered by members of a Community Mental Health Team for the Elderly. The research programme used quantitative and qualitative methods to evaluate the effects of a theoretical training for care staff, a system of mentoring care staff to reinforce the training; and a care-planning intervention for the management of depression which combined psychosocial and medical approaches. The training programme was positively evaluated by the recipients, the trainers and the researcher who observed it. The ability of care staff to detect depression improved significantly over time, and depression was reduced to below case-level in seven of the eight depressed residents who participated in the care-planning intervention. This research suggests that psychosocial interventions that involve collaboration between carers and residents, supported by a Community Mental Health Team, may have an important part to play in supplementing medical management of depression in residential care homes.

KEY WORDS – mental health, depression, older people, residential care, care staff training, care-planning intervention, United Kingdom..

Introduction

As many as one third of residents in residential homes for older people in the United Kingdom suffer from depression (Ames *et al*. 1998; Ames 1993), a similar level to that found in hospitalised medically ill patients (Jackson and Baldwin 1993). In a national study of residential homes, Schneider (1997) reported that 40 per cent of residents had case-level depression.

* Research and Development Unit, York Health Services NHS Trust.
† Social Work Research and Development Unit, The University of York.
** Department of Health Studies and Clinical Evaluation, The University of York.

Despite this evidence, there has been little study of the effects of attempts to reduce the prevalence of depression in homes for older people. Gurland *et al.* (1989) concluded that psychosocial interventions concerned with the mental health of older people have been insufficiently studied. They argued that research is urgently needed to identify effective interventions and to try to improve the outcomes currently achieved. Mann *et al.* (1993) have documented that intervention by appropriately trained staff, who do not have a background in the psychiatry of old age, can effect change in depression among older people. By contrast, Ames (1990) found no evidence that psychiatric intervention, using a range of mainly social methods, reduced depression in residents in homes for older people over a period of three months.

The effective treatment of depression requires its prior identification. Unfortunately, depression and anxiety in older people are often unrecognised and, even when detected, are often not treated (Mann *et al.* 1993). In a recent study, key-workers identified depression in only 17 per cent of residents with case-level depression (Schneider 1997). Lack of training for care staff, who are often the only people to have regular contact with residents, is likely to be one of the reasons for this failure in identification. Low proportions of staff in residential homes receive training that is relevant to mental health (Mabon *et al.* 1991), a fact that may have major implications for the quality of life in residential care settings.

Even if care staff could detect depression more accurately, there remains a question of whether this knowledge would be of use to them in assisting depressed residents. Unqualified care staff are unlikely to feel empowered to intervene in the health needs of residents, beyond providing basic care and support. It would be unrealistic to expect them to provide treatment for depression, but they might be able to effect change through a care planning approach which incorporates some of the principles of a goal planning model (Barrowclough and Fleming 1986).

The care planning approach that is evaluated in this study relies on assessing the individual health and social needs of residents; *e.g.* needs for a hearing aid, for foot care, for company, to talk about loss, to resume an interest, or to be referred to a specialist. Many needs can be detected through discussion and observation and, where there is doubt, residents could be referred for appropriate assessment. It is possible that addressing basic unmet needs would have a significant effect on the emotional wellbeing of residents. However, if a resident remained unresponsive to such help, a care staff member trained to

recognise the signs of probable depression, might feel more confident to suggest referral for further assessment and possible anti-depressant use.

This project comprises two related studies. The focus of the first is on whether care staff can be trained to detect depression in elderly residents. The second assesses whether care staff can be trained to implement a care-planning intervention procedure with the aim of helping depressed residents overcome their depression. Measures were taken to assess improvements in detection rates in care staff in the first study. Additional measures were used to assess outcomes, in terms of change in depression, for residents who had experienced the care-planning intervention in the second study and, since numbers were small, this information was supplemented by qualitative data.

The need to evaluate a replicable model of training was matched by the willingness of a Social Services Department for their care staff to be trained. Managers of Elderly Services in that Department were concerned about feelings of helplessness in their staff when faced with older people whose individual problems were confusing to them. They felt that staff uncertainty meant that residents did not always receive appropriate and beneficial care. In return for training, they were keen to take part in a research project designed to address this issue. Ethical approval to conduct the research was gained in 1995 from the York Health Authority Local Research Ethics Committee.

Study 1: the identification of depression in elderly residents

The aim of this study was to determine whether training increased the ability of residential care staff to recognise depression in residents. To recognise depression a staff member must perceive that there is a problem; they must identify it as depression (rather than, for example, as 'unco-operativeness'); and they need to have a view about what could be done to deal with the problem. Care staff received training on each of these issues and were trained to use a simple checklist to assess depression.

They assessed residents for presence and degree of depression before and after a training course. Their assessments were compared to those of an 'expert': a post-membership (MRC Psych) psychiatric trainee (the research psychiatrist), working with a Consultant Psychiatrist for the Elderly, and with the results of other objective and subjective measures of depression.

Method

Participant care staff worked in two local authority residential homes for older people (category I; old age). Twenty-two out of 26 care staff employed in the homes gave informed consent to participate. Their mean age was 45.6 years (sd. 11.4); their mean length of time working in elderly residential care was 10.9 years (sd. 9.3); and the mean number of short training courses attended during their period of caring was 5.1 (sd. 3.5). None of the staff had relevant professional qualifications or had been on mental health care training. Participants were divided into two groups of 11. Roughly half of each group came from each home. It had been intended that this division should be randomised, but holidays and rotas made this impossible.

There was a total of 56 residents in the two homes and 49 gave informed consent to participate. These 49 residents were screened for dementia by the research psychiatrist or the psychologist, using the Organic Brain Syndrome scale of the Brief Assessment Schedule (BAS: see below). A cut-off score of under 7 on this scale was used as the criterion for exclusion. Eleven residents were excluded at screening which reduced the sample to 38, and two further residents were lost to the study because of communication problems, leaving 36 residents in the study. Of these residents, 12 were already on anti-depressant medication, and the dosages were deemed adequate by the Consultant Psychiatrist. Residents not on anti-depressants were also regularly assessed by the Consultant Psychiatrist and anti-depressant medication was not considered appropriate for these residents. Demographic details for residents are provided in Table 1. There was no significant difference in age and length of stay for residents between the two homes. However, there were significantly more men in Home 1 than in Home 2.

Measures

The Brief Assessment Schedule (BAS) is a standardised, valid instrument for the detection of depression and dementia (Macdonald *et al.* 1982; Mann *et al.* 1989), derived from the Comprehensive Assessment and Referral Evaluation schedule (CARE: Gurland *et al.* 1977).

The Judgements of Resident Health Status scale (JRHS) was specially designed for this project, because there was no suitable measure identified in the literature. Its function was to record the judgements of care staff about the mental state of residents. It

TABLE 1. *Resident demography*

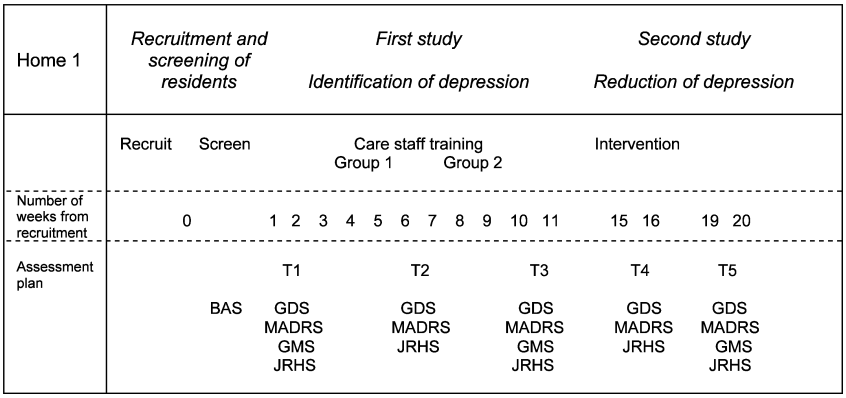
	Home 1		Home 2		Total	
	Mean	SD	Mean	SD	Mean	SD
Age	85.5	6.0	86.0	5.6	85.7	5.8
Months in home	42.7	40.0	35.7	38.5	39.6	39.1
Male	9		1		10	
Female	22		24		46	

comprised five separate continuous visual analogue scales with descriptors at each pole for depressed mood (no depressed mood – severely depressed mood), physical health (very good – very poor), anxiety (no anxiety – very anxious), irritability (not irritable – very irritable), and dementia (no dementia – severe dementia). A 'not sure' option could be checked if care staff felt that they could not rate the dimension in question.

Respondents were also asked to indicate whether they thought the resident was 'in a depressed mood' and if so they were asked to give a brief assessment of the reasons for depression. In addition, they were asked to assess whether the depression should be treated and whether they thought treatment would be effective, indicating their reasons. These questions were included to assess whether care staff expectations of the feasibility of effective treatment for depression increased after training. The research psychiatrist also completed the JRHS in exactly the same way as the care staff, for all residents.

Residents completed the self-report Geriatric Depression Scale, 15-item version (GDS-15: Sheikh and Yesavage 1986) with the support of a researcher, a trained psychologist. A score of under 5 was used to identify 'caseness for depression'.

The Geriatric Mental State Schedule (GMS: Copeland *et al.* 1986) is recognised as the 'gold standard' for assessing psychiatric disturbance in older people (Bowling 1992). It includes a categorical measure of presence or absence of depression: D0 denotes 'not depressed', D1 or D2 'sub-case' level, and D3 to D5 'diagnostic case' level of the disorder. Depression scores D3 and D4 can be categorised as Depressive Neurosis, or Depressive Psychosis, and D5 is categorised as Depressive Psychosis only. The GMS was completed by the research psychiatrist. It is a measure of 'caseness' and severity, and so can be used as a crude indicator of change. A further measure of depression, which is sensitive



BAS	Brief Assessment Schedule
GDS	Geriatric Depression Scale
GMS	Geriatric Mental State Schedule
JRHS	Judgements of Resident Health Status
MADRS	Montgomery and Asberg Depression Rating Scale
T1	Pre-training assessment
T2	Mid-training assessment
T3	Post-training assessment
T4	Mid-Intervention assessment
T5	Post-Intervention assessment (note that this took one week, so the programme was completed 20 weeks after recruitment)

Figure 1: Plan of fieldwork (not to scale)

to change and which is completed by an assessor rather than by the resident themselves, is the Montgomery and Asberg Depression Rating Scale (MADRS: Montgomery and Asberg 1979). This was completed immediately after the GMS assessment by the research psychiatrist. A score of under 12 was used for caseness.

Procedure

The fieldwork for each home covered a 20-week period. Figure 1 shows the plan of the study with the phases of the programme, together with the number of weeks taken; and the timing and content of the resident assessments are shown. One week was allowed for each set of assessments (T1–T5). The fieldwork for Home 2 started five weeks after Home 1 and followed exactly the same pattern.

The assessors (the research psychiatrist, psychologist, care staff and residents) were intended to be 'blind' to each other's observations for the majority of the measurements but, for practical reasons, there were occasions when some could not be made blind. For example, it is likely that care staff discussed some of their assessments with each other despite being asked not to do this. This methodological problem could not be fully controlled in this small study.

Care staff training

The full care staff training programme as used in this study has been described fully elsewhere (Moxon 1996). The training was delivered in the residential homes in four three-hour weekly sessions. Care staff were remunerated from their employer's training budget. For this study, the training objectives were that care staff be able to perceive a potential mental health problem and be able to use a simple checklist (the JRHS) to assess mental health state. The training team comprised four members of a Community Mental Health Team for the Elderly.

The training course syllabus covered definitions of depression; recognition of depression; getting to know the individual person; communicating with depressed older people; the effects of loss; the effects of depression on thinking, feeling and behaviour; the care-planning intervention; and possible treatments for depression. Care staff who completed the training received certificates of participation.

Care staff assigned to the first group were trained in weeks 3 to 6, and those assigned to the second were trained in weeks 7 to 10. This was necessary to ensure that routine care in the homes was not disrupted, and was also incorporated into the design of the study (see below).

Assessments by care staff

The two groups of care staff were trained one after the other. To test whether the training had been effective, all 22 care staff conducted assessments of residents' mental state using the JRHS at three points – before any training (T1); after the first group had been trained (T2, at week 7); and after both groups had been trained (T3, at week 11). It was not possible for each care staff member to assess every resident in the home at all three time points. To ensure that they each assessed a certain number of residents (at least four) at each time point, they were allocated to eight teams (four teams in each home; two or three care staff per team in Home 1 and three or four care staff per team in Home 2). The 36 residents who agreed to be assessed were also allocated to eight groups (four groups in each home) using a stratified randomised selection procedure to control for presence or absence of depression (as judged at the initial assessment), gender and a global assessment of physical health. At each time point each of the care staff assessed a group of four to five residents from the home in which they worked, and they assessed a different group of residents on each of the three occasions.

Care staff were asked not to confer with each other about their

assessments. They had contact with the residents they were to assess for one week's observation before they were asked to complete their assessment.

It was hypothesised that care staff would make more 'accurate' assessments on the JRHS after they had completed the training course. Therefore, it was predicted that the first group of staff to be trained would be more accurate at the second and third assessment points (T2 and T3) than they had been at the first (T1). The second group was predicted to be more accurate at the third assessment point than they had been at the first and second.

Assessments of concordance

The research psychiatrist completed a full assessment of mental state at T1 and T3 using the Geriatric Mental State schedule. The GMS is expensive to administer and aversive to residents if used too frequently and therefore it was not used at every assessment point. The research psychiatrist also assessed each resident, using the MADRS and the JRHS at T1, T2 and T3. In addition, with the support of a psychologist, each resident completed the GDS-15 at each assessment point: a self-report measure of depression severity.

The assessment of the accuracy of care staff judgements of depression was based on the concordance between care staff ratings and the ratings of the expert assessor on the JRHS; and GMS, MADRS and GDS-15 scores for each resident.

It was not feasible to establish inter-rater reliability on the JRHS for individual care staff in relation to the expert assessor's JRHS assessments. This was because, whilst the expert assessor assessed all residents at each assessment, care staff only assessed the four or five residents in their group of residents. Since, however, each resident was assessed by a team of between two and four care staff at each assessment, a mean care staff rating was calculated for each resident by averaging the different care staff ratings for the resident on that occasion. Consequently, the analysis was based on the concordance between the mean care staff and research psychiatrist ratings for each resident.

Assessment of concordance suffers from the potential drawback that it is sensitive to the proportion of residents who are seen as 'depressed'. For example, if the expert assessor and the care staff both considered that 90 per cent of the residents were 'depressed', they would be expected to agree by chance on roughly eight out of 10 occasions. The way in which this problem was handled is described below.

Results

Twenty care staff completed the training course; two were lost through sickness absence. One person missed one assessment point because of holiday commitments.

Regarding physical health, there were significant product-moment correlations between judgements made by the research psychiatrist and the mean care staff ratings on the JRHS, for each care staff group at all three assessment points. These correlations ranged from 0.47 to 0.66 (all $p < 0.05$). The training course did not include training on assessing physical health, and no training effect was observed.

There was no significant correlation between the research psychiatrist and mean care staff judgements on the JRHS for dementia prior to training at T1. Examination of judgements at T3 indicates marked improvement in concordance in both groups ($r = 0.65$, $p < 0.01$; $r = 0.72$, $p < 0.01$). However, this cannot be explained by training, since concordance was also significant for both the trained and untrained groups at T2, the second assessment, ($r = 0.56$, $p < 0.05$ for the group that had been trained; and $r = 0.63$, $p < 0.01$ for the group that had not).

There was no significant correlation between the care staff and expert judgements for anxiety and irritability on the JRHS at any point. Examination of the data suggested a difference between the research psychiatrist and the care staff in the way they used the rating scales. The psychiatrist tended to indicate anxiety and irritability as either present or absent, whereas care staff rated them as traits that existed to a greater or lesser extent in all residents.

Reliability and validity of expert assessments of depression

The consistency of the research psychiatrist's judgements of depression was examined. On the JRHS, he tended to judge the same people as not depressed on all three occasions (for example, the chi square for the association between his judgements at the first and third assessments was 14.75, $p < .001$).

The judgements of the assessor were then examined in relation to the GMS, the MADRS and the GDS-15 (Table 2). Chi square analysis at each assessment confirmed that the assessor's JRHS judgements were consistent with GDS-15 and MADRS scores. They were also consistent with the GMS assessments at T1. However, the chi square for the association between the JRHS and GMS at T3 was not significant. This could have been due to lack of power since GMS assessments were

TABLE 2. *Association between expert assessor judgements of resident depression with other measures of depression*

Expert assessor JRHS with:	Assessment T1 (pre-training)		Assessment T2 (mid-training)		Assessment T3 (post-training)	
	χ^2	n	χ^2	n	χ^2	n
GMS	19.65**	35	–	0	1.94	20
MADRS	9.75*	35	14.81**	35	23.70**	35
GDS-15	17.50**	35	9.80*	35	12.70**	35

All chi square tests: df = 1; * $p < 0.05$; ** $p < 0.01$.

TABLE 3. *Association between care staff judgements of resident depression and other measures of depression including the judgements of the expert assessor*

Care staff JRHS:	MADRS	GDS-15	JRHS (Expert Assessor)
Assessment at T1 (no staff trained)	4.79*	0.15	0.25
Assessment at T2 (half staff trained)	2.53	12.53**	2.54
Assessment at T3 (all staff trained)	7.78*	18.06**	5.95*

All chi square tests: df = 1; * $p < 0.05$; ** $p < 0.01$.

only completed on 20 of the 35 residents on this occasion. This was because some residents were unhappy about being assessed on the GMS a second time.

As the expert assessor completed the GMS and the MADRS, the association between his judgements and these measures was to be expected. However, the association of the judgements with the GDS-15 (completed by the resident with the support of the psychologist) is encouraging evidence of validity, as neither psychologist nor expert was aware of the results obtained by the other.

Relationship between care staff judgements of depression and other measures

Care staff judgements of depression on the JRHS (*i.e.* whether they thought the resident was 'in a depressed mood') were examined in relation to measures obtained on the MADRS, the GDS-15 and the expert assessor's judgements. As can be seen from Table 3, the association for each measure was strongest at T3 when all care staff had been trained. We will return later to the issue of whether this apparent improvement reflected the effects of training or simply of practice and the passing of time. Detailed analysis of care staff judgements of depression showed that by the third assessment 12 staff (60 per cent)

were making a higher proportion of correct judgements (*i.e.* judgements on the JRHS that agreed with those of the research psychiatrist) than they had made before training; four were neither more nor less accurate; whilst four were making a higher proportion of incorrect judgements.

The effects of time and training: multivariate analysis

It was apparent from observation of the data that the concordance between care staff and expert judgements of depression on the JRHS, varied with the home in which the judgement was made. It was also noted that care staff were more likely to make a judgement of depression than not, and so the frequency with which the assessor made such judgements was strongly related to the probability of chance agreement between assessor and care staff. A logistic regression was used to test a model in which the chance of agreement was a function of:

- the home,
- whether the care staff member had been trained,
- whether the expert assessor had made a judgement of depression using the JRHS,
- the interaction between home and training.

The model was based on each individual judgement made by care staff on residents' degree of depression. It suggested that the main effect was whether the expert had made a judgement of depression. Training was not significant either on its own or in interaction with the home.

A similar model was then tested using scores above 5 on the GDS-15 as the criterion of depression. As can be seen from Table 4, the analysis supported the prediction that training would be significantly related to a correct identification where accuracy was assessed against the GDS-15.

It had been expected that there would be an interaction with 'home', with the home where assessments had been more frequently correct at the first assessment, showing less improvement as a result of training. This, however, did not prove to be the case.

As might be expected, the inclusion of the time at which the assessment was made (which was necessarily strongly associated with training) did affect the significance of the association between training and accuracy. Thus, this multivariate analysis supported the idea that something associated with the passage of time improved assessments. It could not, however, establish whether the improvement arose as a result of training or through other possible mechanisms, for example

TABLE 4. *Logistic regression predicting correct staff judgements as assessed against the GDS-15 (1 df)*

Variable	Beta	s.e.	p
Training	.5997	.2497	.0163
Home	−.4693	.2553	.0661
Depressed (GDS > 5)	.2609	.0938	.0054
Constant	−12.7839	36.0183	.7226

the effects of practice, or that the issue of depression became increasingly salient for the care staff group.

The apparent effect of training may have been weakened by 'contamination' between the two care staff groups after the first group had been trained. For example, trained and untrained staff may have discussed their ratings or the training course programme. Furthermore, the fact that the second group were expecting to be trained may have influenced their assessments. It was impossible to disentangle these possible explanations.

Conclusions

The evidence suggests that the research psychiatrist's judgements of depression in the elderly residents were reliable over three assessments and valid, based on the consistency between the self-reported GDS-15 and expert judgements. Therefore, the assessor can be regarded as a good judge of depression, making it possible to assess the accuracy of care staff judgements using the assessor's judgements as the standard.

In this study, care staff were more likely than not to judge residents as depressed, whereas in previous work care staff have been more likely to miss depression in older people (Bannerjee *et al.* 1997). Thus, in our care staff group the problem was one of possible lack of specificity rather than poor sensitivity to the target condition. This introduced the risk that concordance between the expert and care staff would be a function of the probability that the assessor rated a resident as depressed, rather than accuracy of care staff judgements.

Analysis of concordance suggested that after both groups of care staff had been trained, there was an improvement in concordance between expert and staff judgements of depression on the JRHS. In a stricter test, controlling for chance agreement, it was found that training had no impact on improving the specificity of care staff judgements, and that agreement between staff and assessor was merely a function of whether the assessor had judged the resident as depressed. When,

however, caseness on the self-report GDS-15 was used as the standard against which care staff judgements were assessed, there was an apparent effect for training and for the home in which staff worked. This suggests that care staff did become more specific in identifying the mood of residents as residents themselves perceived it. It also suggests that trained care staff tended to be more accurate in their judgements of depression in one home compared to the other.

The passage of time, rather than the specific effect of training, could explain some of the apparent training effect. In a small study, it is difficult to control for contamination between trained and untrained care staff at the same time as controlling for the specific effects of homes. Consequently, it is possible that the care staff who were trained first in each home influenced the care staff who were waiting to be trained. This would tend to mask any specific effects of training.

There was a marked improvement in concordance between the expert assessor and care staff with respect to judgements of dementia. Examination of the data suggests that both the assessor and care staff modified their judgements between the first and second assessment points, and then tended to remain consistent between the second and third assessments. Perhaps the research psychiatrist was becoming familiar with the residents at the same time as care staff were becoming familiar with making judgements about this aspect of the residents' mental health status.

Study 2: the reduction of depression in elderly residents

The aim of the second study was to assess whether care staff with training and supervision could intervene to reduce depression in elderly residents identified as depressed. This followed the completion of the first study, and introduced the care-planning intervention. Although the specific aim was to reduce depression, global health issues were also taken into account in the intervention. The rationale for this was that restrictions consequent on untended physical health problems (*e.g.* sensory problems, and problems with feet) might be a factor in the aetiology of depression in the residents. The care planning intervention incorporated a structured problem-solving approach, in which a resident's needs were sympathetically analysed with their full involvement, and in which a care plan was developed. This is a skilled activity that can be used with older people to improve their overall wellbeing.

In this study, the resident and a member of care staff trained in the first study, worked together on a one-to-one basis to define the resident's health, social and psychological needs. Measurable objectives were agreed and methods for achieving each one were identified. Plans could involve diversionary activities, reassurance, counselling, or arranging for physical interventions to improve health. The essence of the approach was to develop an individually tailored care plan, adapted to possible causes of the resident's depression, which in this client group are varied. The care plan was implemented over an eight-week period.

Any activities agreed in the intervention were tailored to the individual and were additional to the usual group-based diversionary activities provided in the home. The group-based activities normally available were occasional occupational therapy sessions, Church services, weekly bingo sessions, and special celebrations, *e.g.* Christmas, Easter and birthdays.

Care staff were supported by mentors, *i.e.* trained mental health workers, who were familiar with the training programme and whose role was to assist care staff in implementing the care planning intervention with their resident. Unlike traditional methods of treatment, where a mental health professional works with a resident directly to treat depression, in this study the mentor did not meet the resident. This approach to intervention has the potential to be an efficient use of mental health professionals' time.

Outcome measures were taken and compared with measures of depression that had been collected in the first study which, for the purposes of this study, served as baseline measurements. Because the number of residents was small, the limited objective was to assess the plausibility that the procedure could effect a reduction in depression. Quantitative data were supported by qualitative data from logs kept by the care staff involved in the intervention. Were it plausible that the intervention could be effective, this would be the justification for conducting a trial with large numbers.

Method

The five residents with the highest depression ratings in each home, as measured by the GMS, the MADRS and the GDS-15 at the end of the first study (T3), gave informed consent to participate. All but one had been assessed as depressed on the GMS at the first assessment (T1), so their depression appeared to be stable before intervention. Complete datasets were available on only eight residents, as one resident died

during the study and another declined a GMS assessment. Anti-depressant medication remained unchanged throughout the whole period of the study from screening to post-intervention (T5) for all residents except one whose medication was discontinued by the home's Consultant Psychiatrist at mid-intervention (T4).

Twenty of the 22 care staff who had been trained in the first study, were available to work with the 10 depressed residents. It had been intended that the selection of care staff for this study would be randomised but in practice, where the usual key worker had been trained, she carried out normal care together with the care planning intervention. This maintained continuity of care for the resident and minimised operational pressures on the home. Six of the 10 care staff/resident partnerships were the usual ones with the remaining four being random selection allocations (*i.e.* name drawn from a hat).

Mentors

There were six mentors, all from a Community Mental Health Team for the Elderly: a clinical psychologist, an occupational therapist, three community psychiatric nurses and a psychiatric nurse from a Community Unit for the Elderly.

The level of depression of the eight residents was measured to assess change during the intervention process, using the GMS, MADRS and GDS-15. Structured Intervention Logs were designed for the use of care staff to reinforce the training message. These provided qualitative information on progress with the participating resident, care staff understanding of the approach, time commitment, and the impact of the intervention on residents and care staff. Similarly, mentors provided information on the process of intervention through their own logs.

To increase care staff confidence and skill, it was intended that mentors would meet the care staff on a one-to-one basis for weekly supervision sessions of one hour during the eight weeks of the study. There was flexibility in how these sessions were used. The mentors did not meet the residents during this period whilst the care planning intervention was being implemented. Four care staff from each home completed the intervention with the eight residents.

To assess changes in levels of depression and caseness in residents who were included in the treatment group, the GMS assessments of the residents that had been made at T1 and T3, were used as baseline measures. The GMS was repeated at the end of the intervention (T5 at week 20). MADRS and GDS-15 measures were also made at T5,

TABLE 5. *Mean scores on the Geriatric Mental State schedule for residents at three points in time*

Pre-training (T1)		Post-training/ pre-intervention (T3)		Post-intervention (T5)	
mean	sd	mean	sd	mean	sd
2.75	1.16	2.50	1.20	1.00	1.40

Scores are based on a 0–5 scale level:
0: no depression.
1–2: 'subcase' of the disorder.
3–5: 'diagnostic case' of the disorder.

together with an additional measure mid-way through the intervention period (T4 at week 16). For these measures, three other baseline assessments on residents were available from T1, T2 and T3 in Study 1.

Results

It was expected that care staff and residents would identify a number of interventions that might relieve the residents' depression. These interventions could be psychological, social, or to do with physical health and sensory ability. All residents experienced an intervention that aimed at improvement in at least two of these areas, and in half the cases, at least three areas were targeted. In general, it was intended that the intervention should merge into the normal life of the home and cause as little disruption as possible.

Examples of goals and activities included in care plans were: re-introduction to relatives; coping with loss by talking one to one with the member of care staff; encouragement to maintain independence by going shopping; taking more care of own room; changing rising habits to help the resident feel less depressed; going to hospital alone; staff giving attention for constructive behaviour and minimising reinforcement of illness behaviours; re-introducing knitting; and attending to basic health needs (*e.g.* teeth, hearing aids, spectacles).

The GMS is a categorical measure, but the categories do give an indication of the level of the disorder (D0-D5). Therefore, given that this was an exploratory study with insufficient power to assess change using a categorical measure of depression, GMS scores were analysed as if they were indicative of a continuous variable. Mean ratings on the GMS among participant residents showed a reduction in level of depression after the intervention compared with baseline measurements

(Table 5). The differences between the two baseline measures (T1 and T3) and the post-intervention measure (T5) were significant (ANOVA; df 2, $F = 4.5$, $p < 0.05$). Post-hoc comparisons, using the Neuman Keuls Critical Ranges test, showed that GMS scores for T1 and T3 were not significantly different, but T1 and T3 were both significantly different from T5 ($p < 0.05$). There were too few residents to attempt to detect whether there was a difference in results between the two homes.

The same effect was observed for scores on the GDS-15 (Figure 2). The three baseline measures for the GDS-15 were significantly different from the post-intervention measures at T5 (ANOVA; df 2, $F = 4.19$, $p < 0.05$). Post-hoc comparisons showed that GDS-15 scores for T1, T2 and T3 were not significantly different from each other. Scores for T1 and T2 were significantly different from those at T5 ($p < 0.05$), and the difference between scores for T3 and T5 just failed to reach significance ($p < 0.06$). Means and standard deviations for severity ratings were 7.88 (sd. 2.42) at T1; 8.25 (sd. 2.05) at T2; 7.88 (sd. 1.55) at T3; and 5.63 (sd. 1.19) at T5. Scores for the MADRS were more variable over the same period (Figure 2) and there were no significant differences between measures at T1, T3 and T5.

Case studies

Trainer and care staff Intervention Logs provided further evidence of changes in depressive illness status. Seven of the eight interventions were considered to have helped to reduce resident depression. Success seemed to depend on belief on the part of the key worker that she could effect changes, availability of time for her to do this, perseverance in the face of difficulties, and a good relationship with the resident. These factors were affected in their turn by the quality of the mentoring and the relationship between mentor and key worker. In one case the resident was not helped. This resident had a poor relationship with his key worker and the key worker did not make full use of the mentoring relationship. In turn the mentor was unaware that the resident/key worker relationship needed more support.

According to the logs, care staff felt that the most useful parts of the training were those that increased their understanding of depression in the residents. This had made them more tolerant, more interested in the reasons for residents' behaviour, less judgmental, more able to make sense of problems and better able to put questions to them. For some, caring had become more enjoyable.

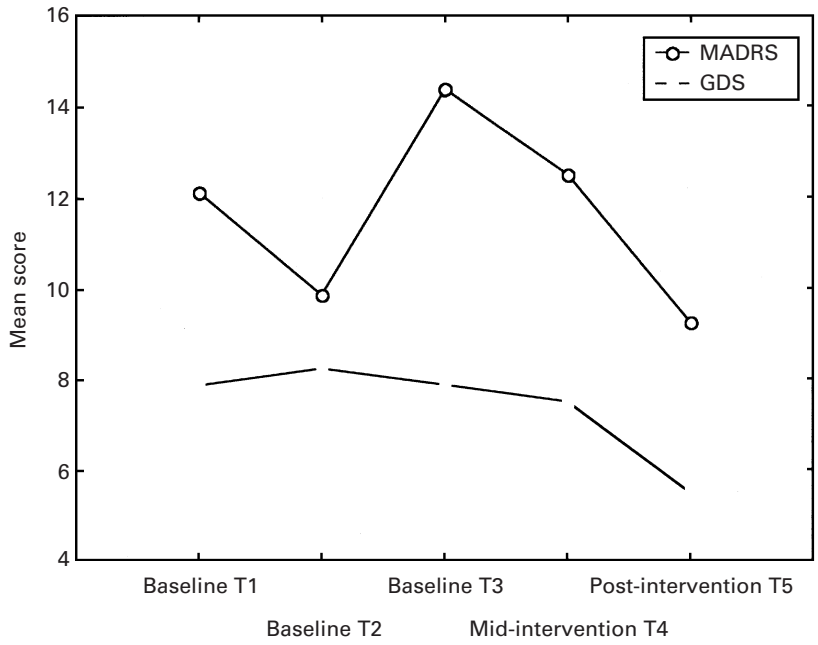


Figure 2: Mean change in depressive illness as measured by the MADRS and GDS-15 (n = 8)

In relation to the intervention, there were reports that training had helped care staff to look at changes that could be made, and had given them permission to make those changes. Training encouraged key workers to acknowledge the residents' moods and empowered them to become actively involved in treatment: 'It has made me realise that I could have used this approach long ago'.

Care staff noticed that the residents started to trust them and that rapport improved, which made intervention easier. Some objectives were more easily tackled and achieved than others (*e.g.* sensory checks) and these were usually done early on in the intervention. Interventions of a more complex nature were harder to tackle and mentors and care staff felt that success was dependent on guidance from the mentor.

There were reports from care staff of residents who they felt had improved in mood and morale because of the intervention. For example, for some residents, morning 'blues' were less pronounced, some residents were more relaxed, brighter and happier, and some had improved in self-care habits and were less withdrawn.

There were mixed responses for how the intervention fitted with

normal working practice. Some care staff found it did not take up too much extra time, whilst others had difficulties with workload and shifts. There were fewer problems where the key worker was the 'natural' one and had not taken on an additional resident for the study. However, it was thought that the time taken paid dividends.

Mentors did not find the task too demanding. Applying the model to a difficult resident was quite a significant challenge for the mentor, but the experience had been 'very rewarding', 'enjoyable' and 'extremely worthwhile'. They were encouraged by care staff commitment and motivation and thought that an external mentor gave staff a feeling of being special. Mentors believed that they could motivate care staff by affirming their ability to succeed. They considered that care staff were willing and eager to conduct the intervention, were positive and enthusiastic, and demonstrated increasing empathy towards their residents. There were mixed responses from mentors about working through care staff and not seeing the resident concerned. Most mentors felt that time spent with the care staff member was more advantageous than working directly with the resident, but a minority of mentors had difficulties with the concept and felt impotent without direct contact with the resident.

Although no one model of mentoring exists (McIntyre *et al.* 1993; Shea 1992), the pilot study revealed a need for more training for mentors on core principles and practices basic to mentoring. Central to conducting effective interventions seemed to be the establishment of a good relationship between the mentor and care staff; reliability of the mentor; commitment to the philosophy that something can be done for depressed people in care homes; and awareness of care staff expectations, confidence and capacity to respond.

Mentors met care staff for three to eight sessions, with an average of five, and sessions averaged one hour (ranging from 35 to 90 minutes). The total input for individual mentor/care staff pairs ranged from two to eight hours. In addition, total time on the telephone was an average of 14 minutes and travelling took an average of two hours for mentors. Although resident and care staff needs varied, mentors thought that the mentoring programme would have been more effective and practical if it had begun with two weekly sessions of one hour, then shorter sessions spaced over the remaining six weeks in response to differing needs.

This second study indicates that it is plausible that the care planning intervention had been effective, judged from changes in measures of depression, and from qualitative case studies. The approach was well received by care staff and rated as a success by the mentors, some of whom considered the process to be a highly effective way of working.

It is noteworthy that repeated measures of depressive state were consistently high in the residents identified for this second study, and that improvements did not occur before the care planning intervention began.

There were no control groups, and the sample size was low, so the results are not conclusive. However, there was significant reduction in depression in residents as indicated by changes in the GMS and GDS-15 scores. This finding was not mirrored for the MADRS. However, the MADRS has not had formal validation in a community elderly population (Katona 1994) and, given the consistency between the other two measures for this small sample, it remains plausible that the care planning intervention was successful.

Discussion

The mental health of older people in residential care has received comparatively little attention. In this research, almost half the residents were assessed as having a 'significant depressive state' at the time of screening, and most residents gave informed consent to take part. Care staff were very interested in learning more about how to help depressed older residents and nearly all agreed to take part and did so enthusiastically.

The trainers, all members of the Community Mental Health Team for the Elderly, provided 12 hours of theoretical training to all care staff over four weeks, and an average of five hours of mentoring to each member of care staff involved in the care planning intervention over a period of eight weeks.

Care staff appreciated the theoretical part of the training programme, attended regularly, and gave the impression of putting a lot of effort into it. The trainers felt that the training went well, as did the main researcher who observed it. A review of the training course and its structure indicated that this was a good programme in terms of content, relevance to care staff and presentation style.

There were similarly positive reactions to the mentoring part of the programme where much seemed to depend on the commitment of the mentor and on the quality of relationship established between care staff member and mentor. Some mentors, however, found that commitment to their clinical workload interfered with their ability to provide continuity in mentoring.

Case studies suggested that the overall approach was appropriate

and worked well for seven out of eight residents. The failure to achieve a good result for the eighth resident was reflected in the poor quality of relationship between the resident and his key worker.

Quantitative data suggest that both aims of the programme were achieved. The accuracy with which care staff were able to identify depression increased over time, as indicated by measures of concordance with the GDS-15, MADRS and by expert judgements. It was not possible to say whether this was due to the training or other influences – for example, the greater salience given to depression by the project and the fact that care staff had practice in making assessments. An unexpected outcome was the apparent improvement in the ability of care staff to identify dementia. There was evidence of some 'contamination' between care staff who had been trained and those who were awaiting training, within homes. This was regarded as a benefit by Elderly Services managers, but it was a disturbance in the research and may explain some of the improvement in accuracy of care staff ratings.

All but one of the residents included in the care planning intervention improved in terms of depression as measured by the GDS-15. Similarly six out of the eight for whom the relevant data were available improved their depressive status on the Geriatric Mental State schedule. These changes occurred after the care planning intervention and despite the fact that very little change had occurred over the repeated prior assessments. However, changes on the depression rating scale (MADRS: a measure designed for the assessment of change in depression) were not statistically significant and greater variation was observed over baseline measures. It is not clear why the MADRS gave different results from the other measures.

There is an urgent need for an effective approach to recognising and treating depression in elderly care homes. This study has tested and refined a model which relies on training and supporting care staff to take an active part in this. The data suggested that the care staff improved their ability to detect depression, and that their responsive interventions helped. This approach contrasts with normal medical care, in that residents were *participants* in the planning and execution of the interventions which were used to help them overcome depression. Also the interventions were highly specific to the needs of the individual residents. In a climate in which it is increasingly recognised that users of mental health services benefit from collaboration with service providers in planning their own care, this psychosocial intervention may be an important adjunct to medical treatment of depression in residential care for elderly people.

References

Ames, D. 1990. Depression among elderly residents of local-authority residential homes. Its nature and efficacy of intervention. *British Journal of Psychiatry*, **156**, 667–75.

Ames, D. 1993. Depressive disorders among elderly people in long-term institutional care. *Aust-N-Z Journal of Psychiatry*, **27**, 3, 379–91.

Ames, D., Ashby, D., Mann, A. H. and Graham, N. 1998. Psychiatric illness in elderly residents of Part III homes in one London Borough: prognosis and review. *Age and Ageing*, **17**, 4, 249–56.

Banerjee, S., Blanchard, M. and Drinkwater, C. *et al*. 1997. *Old Age Depression: a Practical Approach to Treating Depression in Residential Homes*. Lundbeck Limited, Milton Keynes.

Barrowclough, C. and Fleming, I. 1986. *Goal Planning with Elderly People: Making Plans to Meet Individual Needs*. Manchester University Press, Manchester.

Bowling, A. 1992. *Measuring Health: a Review of Quality of Life Measurement Scales*. Open University Press, Buckingham.

Copeland, J. R. M., Dewey, M. E. and Griffiths-Jones, H. M. 1986. Computerised psychiatric diagnostic system and case nomenclature for elderly subjects: GMS and AGECAT. *Psychological Medicine*, **16**, 89–99.

Gurland, B., Kuriansky, J. and Sharpe, L. *et al*. 1977. The Comprehensive Assessment and Referral Evaluation (CARE) – rationale, development and reliability, *International Journal of Ageing and Human Development*, **8**, 9–42.

Gurland, B. J., Mayeux, R. and Meyers, B. S. 1989. The effectiveness of intervention for the mental health of the elderly. In Kane, R. L. (ed), *Improving the Health of Older People: a World View*. Oxford University Press, Oxford.

Jackson, R. and Baldwin, B. 1993. Detecting depression in elderly medically ill patients: the use of the Geriatric Depression Scale compared with medical and nursing observations, *Age and Ageing*, **22**, 5, 349–53.

Katona, C. L. E. 1994. *Depression in Old Age*. John Wiley, Chichester.

Mabon, G. and Hampshire Independent Care Homes Project Group. 1991. *An Induction Programme*. National Institute of Social Work, London.

Macdonald, A., Mann, A., Jenkins, R., Richard, L., Godlove, C. and Rodwell, G. 1982. An attempt to determine the impact of four types of care upon the elderly in London by the study of matched groups, *Psychological Medicine*, **12**, 193–200.

Mann, A. H., Ames, D. and Graham, N. *et al*. 1989. The reliability of the Brief Assessment Schedule, *International Journal of Geriatric Psychiatry*, **4**, 221–5.

Mann, A. H., Blanchard, M. and Waterreus, A. 1993. Depression in older people: some criteria for effective treatment. *Encephale*, **19** Special No. 3, 445–50.

McIntyre, D., Hagger, H and Wilkind, M. 1993. Introduction. In McIntyre, D *et al* (eds), *Mentoring: Perspectives on School-based Teacher Education*. Kogan Page, London.

Montgomery, S. A. and Asberg, M. 1979. A new depression scale designed to be sensitive to change, *British Journal of Psychiatry*, **134**, 382–9.

Moxon, S. 1996. *Promoting Mental Health in Residential Homes, Pilot Project*. Report for NHS Executive, Northern and Yorkshire, Research and Development Directorate. Evaluation and Research Support Unit, York Health Services NHS Trust.

Schneider, J. (ed), 1997. Quality of care: testing some measures in homes for elderly people. *Discussion Paper 1245*. Personal Social Services Research Unit, University of Kent at Canterbury.

Shea, G. F. 1992. *Mentoring: a Guide to the Basics*. Kogan Page, London.

Sheikh, J. A. and Yesavage, J. A. 1986. Geriatric Depression Scale (GDS): recent

findings and development of a shorter version. In Brink, T. L. (ed), *Clinical Gerontology: a Guide to Assessment and Intervention*. Howarth Press, New York.

Accepted 3 November 2000

Address for correspondence:
Sallie Moxon, York Health Services Research Unit, York Health Services NHS Trust, Bootham Park, York Y030 7BY.
e-mail: sallie.moxon@excha.yhs-tr.northy.nhs.uk