Care home staff can detect the difference between delirium, dementia and depression

Analysing interviews of workers provided an insight into the skills needed to identify these three conditions, say Rose Peacock and colleagues

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Abstract

Prevention of delirium is an important part of looking after care home residents, however, it can be difficult to detect, especially in those who have dementia. This article explores the perceptions and experiences of care home staff integrating delirium prevention activity in their everyday work.

As part of the Stop delirium! feasibility study interviews were carried out and when they were analysed five themes were identified: triggers and knowledge; detection and observation; effect of closest contact; changes in management of care; and communication and teamwork to overcome difficulties.

Together these provide insight into how carers identified a potential episode of delirium and indicated the steps that might be taken to manage residents' care. Communication and teamwork were identified as important in delirium prevention and appropriate management.

Keywords
Delirium, dementia, depression

DELIRIUM IS a confusional state caused by an underlying physical condition. Despite having an estimated prevalence in care homes of 14.2 per cent in the UK (Siddiqi *et al* 2009), delirium is under-recognised by nurses (Inouye *et al* 2001). People with dementia are at greater risk of delirium, and the acute confusion associated with delirium may be mistaken as part of their dementia.

Differentiating between dementia, delirium and depression is challenging (Featherstone *et al* 2010) and there is also considerable overlap of depression and delirium in older people (Givens *et al* 2009). Depression is thought to affect at least 40 per cent of care home residents in the UK (Owen *et al* 2008). When people are depressed, withdrawal and sleepiness caused by delirium may be overlooked (Mitchell and Kakkadasam 2011). Distinguishing between dementia, delirium and depression is important because delirium can be prevented (Featherstone *et al* 2010).

Identifying changes in patients' behaviour, however subtle, is an important element of being able to make the distinction. Care home staff believe it is important to try to understand residents' unpredictable behaviours (Brodaty *et al* 2003) and long-term care places staff in a unique position to recognise subtle and slight changes in a resident's usual behaviour that may be associated with delirium.

Carers' knowledge of conditions, causes and triggers enables them to capitalise on their proximity to and relationship with residents as an important part of delivering care (Cook and Brown-Wilson 2010). However, high staff turnover and significant proportions of untrained and inexperienced staff (Siddiqi *et al* 2011) mean that the least experienced and technically qualified people are caring for residents with complex needs.

Feasibility study

The Stop delirium! project was a feasibility study to develop a complex educational intervention aimed at improving delirium prevention and management in long-term care facilities. The findings have been reported elsewhere (Siddiqi *et al* 2008, Siddiqi *et al* 2011) (Box 1).

Aim

The aim of the secondary analysis was to explore how care home staff talked about their perceptions and experiences of integrating delirium prevention and management activities into their daily care routines. This was distinct from the original analysis which focused on the wider effects of the Stop delirium! project.

Method

A secondary qualitative analysis was conducted of 14 interviews collected before and after the educational intervention in the Stop delirium! project during September 2006-July 2007. Secondary analysis involves the use of existing data collected for the purposes of a previous study so that an alternative perspective on the original question can be pursued (Hinds *et al* 1997, Szabo and Strang 1997).

The sample for the secondary analysis was drawn from interviews with staff. Interviews with non-home staff, GPs, community matrons and practice nurses were excluded. The interviews were analysed using thematic analysis: a qualitative method for identifying and reporting patterns or themes in data (Braun and Clarke 2006). The data were coded using NVivo 7 and the coding was guided by a series of questions (Box 2).

Findings

A series of themes was identified:

- Triggers and knowledge.
- Detection and observation.
- Effect of closest contact.
- Changes in management of care.
- Communication and teamwork to overcome difficulties.

Box 1 Summary of the Stop delirium! project

- A feasibility study to develop and deliver an educational package to improve delirium care for older people in care homes. Ethical approval granted by Leeds West research ethics committee.
- Delivered to staff in ten units in six care homes in Leeds over ten months, using a range of methods including interactive teaching, vignettes and group work.
- Programme delivered by a delirium specialist practitioner who facilitated care home staff to produce training materials: posters, checklist and care pathways.
- Methods to assess feasibility included surveys, feedback forms, semi-structured interviews and focus groups, analysis of practitioner's log and documents.
- Findings suggested positive change in staff attitudes and practice after education and potential improvements in a range of outcomes including the number of falls and prescribed medications.

(Siddiqi *et al* 2011)

Box 2 Questions used in the secondary analysis

- What triggers of delirium are identified?
- How do staff perceive and work with residents who are or who have become confused?
- What are the features of the care home environment (physical/organisational/attitudinal) that need to be taken into account?
- What distinctions are made between dementia, delirium and depression?

Triggers and knowledge Staff were knowledgeable about triggers for delirium. This was evident in interviews carried out before and after the educational intervention. Important triggers included infection, constipation, medication, dehydration, falls and a noisy environment or moving to a new or different environment.

A noisy environment was recognised as a trigger for behaviour changes in residents, for example, noise made by some residents upset and agitated others. Staff indicated that it was difficult to distinguish when agitation and upset were responses to the noisy environment or signs of worsening confusion or delirium. An important aspect of their role was to care for residents, to calm them and to help them live with confusion: 'The voice alone, the noise she makes will provoke the rest. The rest can be easily affected by the noise… and will start to talk and shout also' (Interviewee 6).

Although a care assistant linked a resident's recent fall to increased confusion, they did not specify whether the resident was still in pain and whether this was a trigger for delirium. Recognition of these links could lead to help with pain relief which might more quickly reduce confusion.

Detection and observation Possible cases of delirium were often identified through changes in resident behaviour, which staff were able to identify by using their knowledge of triggers in combination with observational skills: 'When a resident's got like a water infection or he or she's constipated you can tell by their behaviour, they can get agitated or sometimes sleepy or, um, very quiet, some tend to be very quiet or sleepy, yeah, then you notice, if you notice those differences' (Interviewee 3).

A change in temperament was identified as a sign or clue to underlying problems that may need

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investigating. For example, the participant described a resident as 'weepy, very emotional' and linked this to the possibility of infection: 'She's confused at the best of times but more confusion, gets weepy, very emotional and it's a sure sign of her having a urinary tract infection' (Interviewee 1).

Staff talked about changes in resident behaviour as an everyday part of their work. Their ability to manage confusing or distressing situations came from experience of working with people with dementia. They found the unpredictability of behaviour associated with acute confusion most difficult to deal with. On a practical level it made it more difficult to provide personal care, and also affected their ability to communicate reassurance that the confused mental state would eventually abate as the resident was not able to comprehend.

Effect of closest contact Care home staff reported they had expertise in caring for residents, knew them well and thought they were suitably placed to notice changes in behaviour. Change in usual behaviour was often first detected by a care assistant who was in closest contact. Often changes associated with delirium were observed during regular care activities. The arrangement of shift patterns meant that staff could be involved in aspects of personal care for long periods of time each day and over blocks of days. Behaviour change was easier to identify when the staff member knew the resident well, and conversely was much more difficult with residents new to the home, which was a period of vulnerability: 'Staff will say, because obviously they're on the, if you like, shop floor more, they'll say you just know, because you know the resident… you might have known them for years and you think this is not their usual behaviour. Something's not right here' (Interviewee 4).

Subtle variations in behaviour could indicate there was something physically wrong and that the resident was trying to communicate discomfort. In one case, where it was seen as usual behaviour for the resident to shout a great deal during the day, changes in intensity and duration were linked to the possibility of other physiological events: 'For this infection, you can see the difference. Even though she shouts…, the intensity, the episodes, you can differentiate now' (Interviewee 5).

Increased restlessness was linked to possible infection: 'When he has an infection… he moves about more… So once he's treated for this, he calms down. He sits down' (Interviewee 5).

The entanglement of dementia and depression was evident; the carer talked about how the resident was aware of becoming more forgetful, which in turn contributed to her low mood. Rather than reminding the resident of her daughter's visit, the carer prompted the resident to recall the visit, and sought to mitigate her distress: 'She gets upset now because she forgets things and her dementia is getting a bit worse and her daughter comes quite a lot… and takes her out… now she's getting upset because she hasn't been… I said: "Wait a minute I think she did, Mary, I think she did come… and didn't you go out to town the other day?" It all depends on how you can see her getting depressed about it or getting upset because she's forgot' (Interviewee 3).

Changes in management of care Where behaviour changes were explained as moodiness, lack of co-operation, attention seeking or part of the ageing process, there was a risk that underlying causes of change would not be considered or investigated:

'Just shouting all day, screaming (unclear) the table all day… since he came back from hospital, he became like that, just shouting all day' (Interviewee 5).

'Oh maybe it's dementia, or he's getting old, probably that's why he's a bit confused… or just attention seeking' (Interviewee 3).

This resident may have been frightened and disoriented with the change in surroundings and needed reassurance, or he was trying to seek attention because he was in pain or felt unwell. Proximity and knowledge must work in combination to be effective otherwise significant changes in behaviour could be ignored.

Some of the post-intervention interviews showed an increase in curiosity by staff about changes in behaviour and its possible underlying causes, rather than assuming erratic behaviour was just part of dementia. Observations of behaviour change in someone with dementia assumed a new significance for some members of staff, and the issue was not only about how to manage the effect of the behaviour on the group of residents around them. For example, one member of staff talked about a resident who often shouted; although this did not stop she had noticed changes in the intensity and duration of the shouting and linked it to the possibility of infection.

Similarly, another resident became unusually restless when they had an infection. Differentiation of the behaviour of residents with dementia and linking of changes enabled care staff to identify potential cases of delirium more quickly than before.

They carried out observations and reported to senior staff with increased sophistication: 'and then they act on it, you know, they make sure that she gets, whoever, gets hourly fluids' (Interviewee 2).

Knowing the boundaries between lifestyle choice and concerns about providing adequate care to prevent delirium posed difficulties: 'We've got one or two here at the moment that live almost on fresh air and smoke for England… you've got to balance people's rights as well so that's quite, a bit of a tricky one because it's… it's their right, it's their lifestyle' (Interviewee 4).

In some instances staff recognised the problem, they knew what to do and had taken steps to manage dehydration, but felt powerless to overcome the resident's refusal to drink. Ultimately, the resident was admitted to hospital. Although this resolved the immediate problem, a stepwise deterioration in the resident's long-term condition occurred: 'We knew he was dehydrated because all his skin was dry. We knew he wouldn't, I mean he was on a fluid chart and he just refused to drink and then he just gradually started getting more and more confused, only over a few days, and then we had to get the doctor out and he was admitted to hospital' (Interviewee 1).

Communication and teamwork to overcome difficulties Clear connections between depression and the increased risk of delirium were not identified in the interviews. Frailty, low mood, withdrawal and loss of appetite were signs of change that were taken seriously and attempts were made to communicate this across the staff team using the key worker and shift handover systems. Concern for the resident's condition was kept on the agenda by the key worker: 'Most of it would be just done through handovers but after, you know, a couple of days. Often it'll be key workers that'll say, "I'm really concerned about them, they're hardly eating anything now"' (Interviewee 4).

Staff talked about involving residents in caring for themselves, as a means of maintaining independence and dignity and also as a means of developing co-operation. Without reciprocity between the carer and the resident the danger existed that the usual activities of daily care could trigger agitation. Team work, swapping duties for the day or part of the day, or help from other members of staff were relied on to share the more demanding aspects of care when this reciprocity or understanding were not present.

Discussion

Analysis of the interviews identified five key themes: triggers and knowledge, detection and observation, effect of close contact, changes in management of care, and communication and teamwork. Together these themes provide an insight into how carers identified a potential episode of delirium and indicated what steps might be taken to manage residents' care. Communication and teamwork were also identified as important in delirium prevention and appropriate management.

Staff narratives showed that knowledge varied, with the most widely described trigger being urinary infection, as reported in Siddiqi *et al* (2011). Using a combination of knowledge, detection and observation staff identified subtle changes in behaviour that gave them cause for concern and took appropriate action to manage the underlying cause of the delirium.

Staff recognised the long slow decline of dementia where behaviour changed over a longer period of time. Although clear distinctions between depression and delirium were not identified, depression and low mood were highlighted as comorbid with dementia. Carers understood that residents with this combination were at high risk of becoming physically ill. The findings reflect the comorbidity of delirium with dementia and depression that are well documented in other studies (Givens *et al* 2009, Mitchell and Kakkadasam 2011). However, there was under-recognition of delirium where acute change was construed as attention seeking, ageing or part of dementia.

The culture of the care home has been found to influence the quality and type of relationship between residents and staff (Cook and Brown-Wilson 2010). Additionally, if staff focus on functional tasks the development of social exchange is limited. Our study also found that the relationships developed between staff and residents were based on caregiving routines. These provided a foundation from which staff could recognise changes in residents' usual character and temperament, even when those residents were living with severe dementia. However, some staff perceived aggressive and unpredictable behaviours as the person being deliberately uncooperative, which concurs with the findings of Brodaty *et al* (2003).

Where care workers talked about the sensitivities of intimate care activities, they identified how interactional skills needed to be used to prevent

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further distress to residents and so enable the task to be completed.

Challenges

The qualitative data analysed for this study were drawn from a pilot intervention in six care homes in one city and it would be useful to consider how the findings might apply to work in a wider base of care homes. Care home work is often portrayed as a service that is undeservedly neglected (McCormack 2001, Sprinks 2011), yet considerable skill is required to deliver care. Some of the skills needed to prevent and manage delirium are basic elements of nursing care. This study illustrates that the care home context and environment add complexity to the realisation of these skills.

Underfunding, poor staffing and lack of recognition of care home staff have created a situation where delivery of this delicate mix of nursing, interactional care and management of the environment is delegated to hard-pressed staff (McCormack 2001, Sprinks 2011). Feasibility studies such as the Stop delirium! project help by developing educational interventions aimed at improving care in long-term facilities. The contributions of care home staff to the design of training materials for Stop delirium! indicated expertise and interest in making improvements to their place of work and care provided.

Conclusion

The co-existence of dementia, delirium and depression presented challenges to the management of care home services. Care workers were able to distinguish between these three distressing conditions and relied on proximity and relational skills to detect important changes in residents' conditions.

Implications for practice

- Training in delirium prevention can broaden care workers' repertoire in managing confusion in residents.
- Unqualified staff should understand the rationale behind actions such as monitoring dehydration and constipation.
- Care home managers should encourage staff to reflect on underlying causes of behaviour change in residents.
- Communication of concerns in usual systems such as handover and key worker systems is essential.

Online archive

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Conflict of interest
None declared

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