The care of older people with a delirium in acute care settings

Aims and intended learning outcomes

Do you always recognise when an older person in your care develops delirium? What can you do to contribute to the multidisciplinary assessment and treatment of this common and complex condition? The aim of this article is to present recent developments which add to your understanding of delirium and to encourage you to reflect on how you and your multidisciplinary colleagues respond to older people who develop delirium in your own practice setting. After reading this article you should be able to:

- Provide a brief definition of delirium
- Identify older people who are most at risk of developing delirium and the situations most likely to cause it
- Appreciate why it is important to identify accurately and promptly a diagnosis of delirium
- Give examples of assessment tools that can be used to detect cognitive change
- Develop a proactive approach to the care of people who are recovering from an episode of delirium
- Consider the key contributions that nursing can make to multidisciplinary care.

Introduction

Delirium, which is also described as an acute or toxic confusion, occurs at any age, but is most likely to be seen in the very young or the very old. In older people, delirium occurs due to decreased reserve capacity in the ageing brain making it less able to adapt to the stress of acute illness, medication, a change in the environment or the combination of all three factors (Fretwell 1990). The chief characteristics of delirium are its acute onset, alterations in attention and cognition, and the way in which it fluctuates.

Although delirium is considered to be a transient and reversible condition, it can persist for 30 days or longer (Inouye 1998), and can have residual effects for many months. The people most at risk are over 85 years of age (Levkoff et al 1988) with numbers in this age group set to increase by 66 per cent over the next 35 years (OPCS 1993).

It is now recognised that delirium is a manifestation of an often serious but reversible medical condition, which if left untreated can lead to further complications, lengthy stays in hospital and even death (Lipowski 1990). Studies into the occurrence of delirium tend to be carried out in clinical areas providing services to large numbers of older people, such as general medical wards, general surgical and orthopaedic wards.

Between 10 and 53.2 per cent of medical patients are admitted with or go on to develop delirium. Prevalence for surgical patients ranges from 6.8 to 60 per cent (Milisen et al 1998). There is now more attention being given to the occurrence of delirium amongst nursing home residents (Mentes 1995, Culp et al 1997). Most nursing homes operate as nurse-led units so nurses who work regularly in care homes need to be skilled in the prompt recognition of delirium followed by urgent referral to a doctor. A recent study also looked at the rate of delirium in older people living in their own homes and established this at the surprisingly high level of 35 per cent (Sandberg et al 1998).

In brief

This article suggests that nurses should play a major part in the screening, assessment and management of delirium in older people in acute settings.

Keywords

- mental health
- elderly nursing
- screening

These key words are based on the subject headings from the British Nursing Index. This article has been subject to double-blind review.

TIME OUT 1

Before you read any further check out your own ability to recognise when a person is developing delirium by considering which of the two patients described in Box 1 overleaf is likely to have a diagnosis of delirium?
**Box 1 Case studies**

- Martha Allan is a patient in a rehabilitation ward. She is recovering from a fall and is looking forward to going home in two days time. You go to give Mrs Allan her early morning medication and find her busying herself with the bedclothes and unable to concentrate on what you are asking her to do. Her movements are quick and she seems more enervated than usual. She tugs out the blue cellular blanket and tells you that it is the jumper she is knitting for her son.

- Catherine Wiley is a resident in the care home. Miss Wiley chooses to spend much of her time in bed and she prefers her own company most of the time. This morning when the care assistant took Miss Wiley her breakfast she was still sleeping. Miss Wiley did not respond when her name was called. The care assistant suspected that she was just more tired than usual as she got up to attend a concert the previous afternoon. The care assistant decides to leave her a little longer.

**Diagnosing delirium**

The most recent criteria for diagnosing delirium, based on the consensus of experts, are given in box 2. A diagnosis of delirium can also be made when there is insufficient evidence to support criterion 4, if the clinical presentation is consistent with delirium, and the clinical features cannot be attributed to any other diagnosis, for example delirium due to sensory deprivation. It is most likely that Mrs Allan meets the typical picture of an older person developing a delirium, although it is equally possible that Miss Wiley is also developing a delirium. It is not possible for the nurse to diagnose, but the signs should be enough to alert the registered nurse that further medical and nursing assessment needs to take place.

Inouye (1998) suggests that, like falls, delirium represents a ‘multifactorial syndrome’. There is a complex interrelationship between a vulnerable person with particular predisposing factors and precipitating factors. For example, a person with severe dementia might develop delirium after receiving a single dose of night sedation. On the other hand, it would take a major ‘insult’, such as heart by-pass surgery and a stay in ITU, to cause a fit, 80-year-old person with no cognitive deficits to develop delirium. The model developed by Inouye and Charpentier (1996) to illustrate this relationship is shown in figure 1 overleaf. Box 3 contains some of the chief predisposing and precipitating factors for delirium.

**TIME OUT 2**

Refer to the model in figure 1 and the examples in box 3. Consider two patients you were caring for recently who developed delirium. Identify the predisposing and precipitating factors for each person. On reflection, were there any precipitating factors that could have been avoided?

**Definition of delirium**

Delirium is characterised by a disturbance of consciousness and a change in cognition that develop over a short period of time. The disorder has a tendency to fluctuate during the course of the day, and there is evidence from the history, examination or investigations that the delirium is a direct consequence of a general medical condition (American Psychiatric Association 1994).

Delirium is commonly the only sign of ‘hidden’ and serious life-threatening illnesses such as pneumonia, and myocardial infarction in older people. It is important, therefore, to be able to recognise it and its significance. Delirium should be formally diagnosed by a medical...
practitioner or a gerontological nurse specialist through cognitive assessment. This must include finding out the
person’s usual level of cognitive functioning from relatives, carers or any other person who knows the patient
sufficiently well to comment on their mental wellbeing (RCN and Help the Aged 2000). This is crucial in order
to distinguish between delirium and dementia, where a degree of cognitive decline will be the norm for an individual with dementia. Bear in mind though that the patient may have both dementia and superimposed
delirium, in which case deficits in cognitive function will be more pronounced than usual (Fick and Foreman
2000). It may not always be possible to determine whether the person is cognitively impaired through general conversation, so, a brief cognitive screening test is recommended for all older people admitted to hospital. Nurses with preparation and multidisciplinary team support are well placed to carry out both risk screening and initial assessment. Medical assessment and diagnosis is vital, as where there is a delirium there is also a serious medical condition that needs investigation, diagnosis and treatment.

However, nurses can and should play a role in risk screening and assessment processes. Most cognitive screening and assessment tools require a small amount of training to use and can be used by most members of the multidisciplinary team including nurses. Cognitive screening tools such as the Abbreviated Mental Test Score (Hodkinson 1972) and the Mini Mental State Examination (Folstein et al 1975) are generally recommended as part of medical and nursing assessments for all older people on admission to hospital. These tools will not give a diagnosis of delirium but will alert the team to the fact that cognitive impairment is present and, if the tool is repeated, it will also pick up changes in cognitive impairment.

Attention/inattention can be assessed using simple tests like asking the individual to recite the months of the year backwards or count backwards from 20 to 1, something that a person with delirium will be very unlikely to achieve.

Among methods of screening patients for delirium are the Confusion Assessment Method (CAM) (Inouye et al 1996) and the NEECHAM Confusion Scale (Neelon et al 1996). The CAM is in the form of an algorithm and is a useful guide for all nurses, particularly those who work in care homes. The CAM provides a sound basis for clinical decision making and articulation of the presenting problems to a doctor on call in order to ensure swift attention for the patient. Compare DSM IV (box 2) with CAM criteria (box 4) and note the similarities. CAM consists of the four core diagnostic criteria for delirium. It is easy to use, completion takes less than five minutes and the method appears to have better sensitivity and specificity than other cognitive screening instruments (Pompei et al 1995).

The NEECHAM Confusion Scale was developed by nurses in response to dissatisfaction with the questionnaire approach to cognitive assessment. The nurses argued that some patients might be disadvantaged by lack of formal education, fatigue and an unfamiliar environment. Besides, nurses preferred to assess patients based on observation in the course of their usual practice. The scale consists of nine components of information processing, performance and vital function items. It combines nursing assessment and brief interactions with patients and completion of the scale takes ten minutes. If you are interested in reading more about the NEECHAM Confusion Scale you can obtain the article through the RCN care library (Neelon et al 1996).

**Box 3 Predisposing and precipitating factors for delirium**

**Predisposing factors**
- Dementia
- Severe underlying illness
- Functional impairment
- Advanced age
- Chronic renal failure
- Dehydration
- Sensory deficits

**Precipitating factors**
- Medications
- Immobilisation
- Use of indwelling catheters
- Malnutrition
- Iatrogenic e.g. transfusion
- Infections
- Metabolic disturbance
- Environmental and psychosocial influences

**Feature 1. Acute onset and fluctuating course**

This feature is obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient’s baseline? Did the (abnormal) behaviour fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

**Feature 2. Inattention**

This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

**Feature 3. Disorganised thinking**

This feature is shown by a positive response to the following question: Was the patient’s thinking disorganised or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

**Feature 4. Altered level of consciousness**

This feature is shown by any other answer other than alert to the following question: Overall how would you rate this patient’s level of consciousness? [alert [normal], vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unrousable]]

The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.
Precipitating factors

Bair B, Toth W, Johnson MA

REFERENCES


Figure 1 Predictive model and interrelationship with baseline vulnerability

<table>
<thead>
<tr>
<th>Predisposing factors/vulnerability</th>
<th>Precipitating factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>High vulnerability</td>
<td>High precipitating factor</td>
</tr>
<tr>
<td>Severe dementia</td>
<td>Major surgery</td>
</tr>
<tr>
<td>Severe illness</td>
<td>ICU stay</td>
</tr>
<tr>
<td>Major depression</td>
<td>Psychoactive medications</td>
</tr>
<tr>
<td>Strong social supports</td>
<td>Sleep deprivation</td>
</tr>
<tr>
<td>High self-efficacy</td>
<td>Single dose of night sedation</td>
</tr>
<tr>
<td>Low vulnerability</td>
<td>Low precipitating factor</td>
</tr>
</tbody>
</table>

(Adapted from Inouye and Charpentier, 1996)

REFRENCES


Key areas for nursing interventions

There is a danger that nurses do not recognise delirium early enough to prevent it or minimise its effects. There is also a danger that nurses do not proactively intervene when it is recognised. Instead, they resort to a limited number of reactive strategies, such as over-use of medications where behaviours, such as wandering, shouting and aggression, become challenging for the multi-disciplinary team. Nurses can play a key role in proactively screening and assessing older people for the risk of developing delirium and in assessing cognitive impairments in those identified as being at risk. Some people may want to talk through what happened to them and be reassured about why they experienced a delirium and the ways in which they behaved.

TIME OUT 3

Think about how you might go about assessing a patient who is recovering from a delirium to see if they want to talk through their experience?

Finally, not all the experiences of altered perceptions are frightening and disturbing. Some patients hallucinated about seeing friends and relatives, but whenever this occurred people expressed frustration because they were unable to interact with their loved ones. The friends and relatives were there in form, but seemed oblivious to the attentions of the patient. One woman recalled being visited by her brother who had been dead for 12 years: ‘After a few hours, I remember I saw a person sitting next to me and I thought, that’s my brother. He’s been dead 12 years … and they told me after, I kept shouting, What is the time? Won’t cost you anything, tell me the time.’

TIME OUT 4

Recap your understanding of what you have read so far and then on a piece of paper make two columns, one headed what we do well and the other what we need to improve. Make a list of what you feel your multi-disciplinary team does well and what it needs to develop.

TIME OUT 5

Brainstorm the other areas you feel nurses have a role to play in the management of a delirium?
Apart from supporting medical treatment, nursing interventions described in the literature typically tend to be focused around creating the best environment for the older person, and on the older person’s interpersonal and psychological needs (Miller 1996).

Clearly there is also a role for nurses to ensure that where older people are experiencing great distress, and/or behaving in a way that is harmful to them or others, some form of medication, usually sedation, may be needed. In this situation, nurses need to make sure they have tried all other alternatives, and that any sedation is given in amounts appropriate for older adults and is reviewed regularly to avoid the complications of over usage (RCN 1999).

Foreman (1990), referring to Williams et al (1985), suggests that nurses’ key interventions should be focused around symptomatic and supportive measures aimed at enabling the patient to restore a sense of control, relieving any pain and discomfort and promoting physical and mental activity.

Foreman (1990) points out, as do many other authors, that older people with multiple chronic illnesses and polypharmacy are at a particularly high risk for delirium. Stromberg et al (1997) suggest from their research that it is possible to reduce post operative cognitive impairment by routine monitoring of cognitive status, high level of continuity of care and an orientation programme. Helping older people to organise themselves in an acute environment includes:

- welcoming the person and orientating him/her to the ward or setting
- making the environment familiar (signs, personal possessions)
- enhancing the person’s orientation abilities (use of correctly fitting and working sensory aids) and cues in the environment that can be used for orientation purposes (clocks, signs, written information sheets)
- having regular contact with the same staff (continuity of staff)
- involving families and friends (encouraging regular and frequent visiting and staying over)
- managing sensory input appropriate for each individual (decreasing or increasing light and noise levels, ensuring sleep).

**TIME OUT 6**

From the above list which interventions are you skilled at and which ones do you need to develop your skills?

According to Foreman (1990), these interventions on their own are not enough to reduce and/or prevent delirium, although they do form the key areas in which nurses can contribute to multidisciplinary team management of delirium. Nurses need to develop their knowledge about delirium and how older people can experience delirium in order that they know what can be expected. Middleton et al (1999) found that nurses who expected to find disruptive behaviours because they knew them to be part of a medical condition or related to it, for example from pain and discomfort, were less likely to feel stressed than nurses whose perception was that the person was being disruptive. Nurses with more advanced knowledge are more likely to select and use a wider range of interventions and thus improve their chances of being effective (Bair et al 1999).

**TIME OUT 7**

Recap your understanding of the section on key nursing interventions. Make a list of what you feel your nursing team does well and another of what it could improve upon. You may also like to write a practice profile. Turn to page 26 for guidance on what to do.

**Conclusion**

If your nursing and multi-disciplinary team is not doing anything specifically for screening, assessing and managing delirium in older people then it is not doing enough. Older people regularly use acute services and delirium in older people is a common occurrence. Ideally, there should be a multidisciplinary guideline, protocol or standard on the screening assessment and management of delirium that includes responding to the older person’s experiences of delirium. Episodes of delirium can also be considered as adverse events and subjected to audit or multidisciplinary case review in order to maximise learning and developments in patient care.


Miller J (1996) A clinical project to reduce confusion in hospitalised older adults. MEDSURG Nursing, 5, 6, 436-444.


Box 1. Framework for reflection

- What have I learnt from this article?
- To what extent were the intended learning outcomes met?
- What do I know, or can I do, now, that I did not/could not before reading the article?
- What can I apply immediately to my practice or client/patient care?
- Is there anything that I did not understand, need to explore or read about further, to clarify my understanding?
- What else do I need to do/know to extend my professional development in this area?
- How might I achieve the above needs? (It might be helpful to convert these to short/medium/long-term goals and draw up an action plan).

Box 1. Examples of possible practice profile entries

Example 1 After reading a CPD article on ‘Communication skills’, Jenny, a practice nurse, reflects on her own communication skills and re-arranges her clinic room so that she will sit next to her patients when talking to them. She makes a conscious decision to pay attention to her own body language, posture and eye contact, and notices that communication with patients improves. This forms the basis of her practice profile.

Example 2 After reading a CPD article on ‘Wound care’, Amajit, a senior staff nurse on a surgical ward, approaches the nurse manager about her concerns about wound infections on the ward. Following an audit which Amajit undertook, a protocol for dressing wounds was established which led to a reduction in wound infections in her ward and across the directorate. Amajit used this experience for her practice profile and is now taking part in a region-wide research project.

Box 3. Portfolio submission

Checklist for submitting your practice profile

- Have you related your practice profile to the article?
- Have you headed your entry with: the title practice profile; your name; the title of the article; and the article number?
- Have you written between 750 and 1,000 words?
- Have you kept a copy of the practice profile for your own portfolio?
- Have you completed the cut-out form and attached it to your entry?
- Have you enclosed your cheque?