Nursing Older People

mental health

HOLISTIC PRACTICE

Nursing care for people with delirium superimposed on dementia

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Abstract

Nursing and healthcare is changing in response to an ageing population. There is a renewed need for holistic nursing to provide clinically competent, appropriate and timely care for patients who may present with inextricably linked mental and physical health requirements.

This article explores the dichotomy in healthcare provision for 'physical' and 'mental' health, and the unique role nurses have when caring for people with delirium superimposed on dementia (DSD). Delirium is prevalent in older people and recognised as 'acute brain failure'. As an acute change in cognition, it presents a unique challenge when occurring in a person with dementia and poses a significant risk of mortality. In this article, dementia is contrasted with delirium and subtypes of delirium presentation are discussed. Nurses can recognise DSD through history gathering, implementation of appropriate care and effective communication with families and the multidisciplinary team. A simple mnemonic called PINCH ME (Pain, INfection, Constipation, deHydration, Medication, Environment) can help identify potential underlying causes of DSD and considerations for care planning. The mnemonic can easily be adapted to different clinical settings is discussed with a focus on nutrition.

Keywords - assessment, delirium, delirium superimposed on dementia, dementia, mental health, older people

With a growing older population and increasing number of people with multiple co-morbidities, the face of healthcare and healthcare provision is changing. Historically, care could be viewed as dichotomous, being split in practice and policy between that typically concerned with physical health, and that with mental health. At a global level, the World Health Organization (WHO) (2009) action plan for non-communicable diseases focuses on physical health conditions, with discrete guidance for mental health (WHO 2008). The way healthcare is delivered, explored and commissioned needs to change. In 2013, Kolappa et al called for WHO to recognise the effect of mental illness on physical health; this reflects the words of Brock Chisholm, the first director of WHO and a psychiatrist, who stated 'without mental health there can be no true physical health' (WHO 1954).

Dementia and delirium

The effect of an ageing population is becoming evident in clinical practice, as well as on individuals, their families and communities. The Alzheimer's Society (2014) predicts that there will be more than one million people in the UK living with dementia by 2025. While dementia has many subtypes and manifestations, there is consensus that it is an ongoing, clinical syndrome caused by disease or injury to the brain with usually a chronic and progressive nature (WHO 2016). The National Institute for Health and Care Excellence (NICE) (2006) defines dementia as 'a progressive and largely irreversible clinical syndrome that is characterised by a widespread impairment of mental function'. While defined in terms of mental function, dementia may result in increased needs relating to physical care, health and well-being. Nurses need to have an awareness of dementia care, irrespective of registration or specialism, since people with dementia may be seen in all areas of care.

In contrast to dementia, delirium is defined as 'a common clinical syndrome characterised by disturbed consciousness, cognitive function or perception which has an acute onset and fluctuating course' (NICE 2010a).

Delirium is potentially fatal in older people (Fick and Mion 2008, Kolanowski et al 2011) and is a medical emergency (Fick and Mion 2008). It can be thought of as 'acute brain failure' (Inouye et al 2014) in a similar way to other acute organ failures.

Presentation of delirium falls into three main subtypes:

- Hyperactive: restlessness, heightened arousal, agitation or aggression, hallucinations and hypervigilance (Voyer et al 2006, NICE 2010a).
- Hypoactive: drowsiness, lethargy or sleepiness. Being slow to respond or having slower or reduced movements (Voyer et al 2006, Fong et al 2009a, NICE 2010a).
- Mixed: features hyperactive and hypoactive symptoms.

Recognising hypoactive delirium appears to present more of a challenge than hyperactive delirium (Inouye et al 2001, Fick et al 2007). It is more common in patients with severe cognitive impairments (dementia) (Voyer et al 2006). With a deficit in clearly identifiable behavioural symptoms, such as agitation, hypoactive delirium is seven times more likely to be under- or unrecognised by nurses (Inouye et al 2001). There is a risk that under-recognition may leave the delirium untreated and unresolved. The exact pathophysiology of delirium remains unclear, which adds further complexity. Neurotransmitters (Shapiro and Mervis 2007, Inouye et al 2014), inflammation, metabolic and electrolyte abnormalities, psychological stress and some genetic factors may contribute to delirium (Inouye et al 2014), therefore, comprehensive assessment of multiple factors is essential. While potentially life threatening, delirium is preventable and treatable (NICE 2010a), but this relies on its recognition in the first instance.

Delirium superimposed on dementia

The recognition and assessment of delirium in people with dementia – delirium superimposed on dementia (DSD) – presents a particular challenge in clinical practice. Established cognitive impairment due to dementia may make

recognition problematic. Prevalence rates echo this, showing great variance in DSD reporting, ranging from 22% to 89% of patients over 65 years of age with dementia and in hospital or community settings (Fick et al 2002). Cognitive decline in people with Alzheimer's is accelerated after an episode of delirium (Fong et al 2009b). There is an increase in the 12-month mortality rate in people who have experienced DSD in comparison with people who have experienced delirium or dementia in isolation (Bellelli et al 2007).

Clinicians may misinterpret symptoms of delirium as behaviours associated with dementia (Fick and Mion 2008). There is evidence that DSD is unrecognised by nursing and medical staff (Fick and Foreman 2000). It is important that delirium in patients with dementia is not missed or acute changes in presentation are not attributed to dementia progression without exploration and investigation for potential delirium. It can be difficult to identify if a person has delirium, dementia or DSD. NICE (2010a) offers guidance, stipulating that if clinical uncertainty exists, the potential delirium should first be managed, including a comprehensive assessment for any underlying causes of delirium. Failure to recognise DSD may also leave the acute, serious and potentially reversible DSD unrecognised and untreated, as with delirium in isolation (Andrew et al 2005, Fick and Mion 2008) and with a negative effect on patient outcomes.

Delirium diagnosis

Contemporary guidance in the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5) (American Psychiatric Association (APA) 2013) provides clear criteria for a diagnosis of delirium. A clinician who is trained to complete the assessment (NICE 2010a) should make a formal diagnosis. The criteria detail delirium, presenting with a disturbance in attention and awareness, as the first diagnostic criteria (APA 2013). The DSM-5 criteria place increased and sustained focus on the exploration of potential underlying physical causes, detailing that the disturbance is directly linked to either a medical condition, intoxication, substance withdrawal, toxin exposure or multiple causes (APA 2013). The diagnostic criteria state that this must be evidenced through clinical history, examination or laboratory tests (APA 2013). For all nurses, irrespective of whether they are adult or mental health registered and irrespective of competence to complete the formal diagnostic process of delirium using specified criteria, the overarching care premise must be to provide individualised, holistic nursing care. This care must take into account the person's mental and physical health needs.

Assessment of underlying causes: PINCH ME

Nurses can recognise and begin conversations about potential DSD. Providing direct patient care and being at the bedside, nurses are uniquely placed to observe changes to a patient's presentation, have conversations with next of kin or care providers, and gather personal histories. A timeline of preceding events is valuable in the diagnosis of delirium, dementia and DSD. An accurate history is vital and sharing this information promptly with the wider multidisciplinary team (MDT) may make the distinction between delirium, dementia and DSD and promote timely diagnosis and treatment. Onset of presentation, any changes in behaviour, stressful incidents or changes in daily life can be clarified. While gathering a history of events, nurses can support the patient and family and communicate to the clinical team and the family what is known and what is left to understand.

While delirium can be precipitated by a single element, often it presents as interplay between multiple components (Inouye et al 2014), which should be identified and addressed to aid resolution. The use of a mnemonic may assist in the recognition of areas for assessment and for starting conversations with family and the clinical team. This in turn will enhance care planning and provision. The mnemonic PINCH ME is advocated by the Let's Respect campaign (2014) and can help identify potential underlying causes of DSD and considerations for care planning:

P: Pain.

IN: INfection.

C: Constipation

H: deHydration

M: Medication

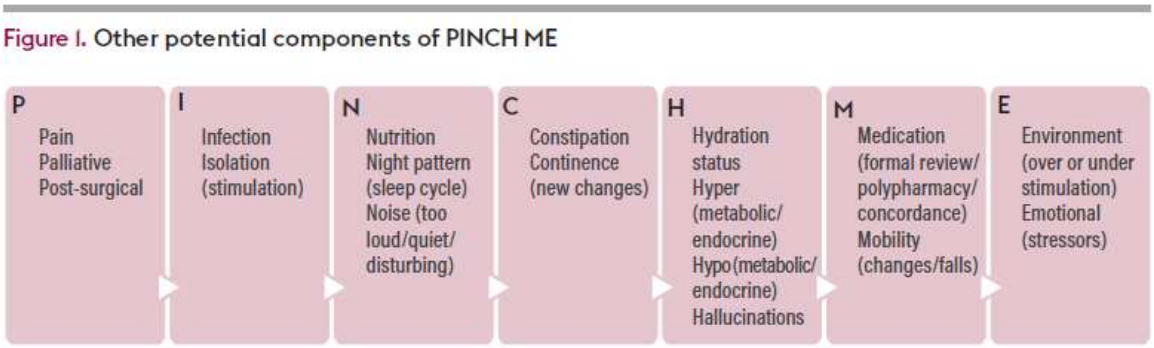
E: Environment

There are several versions of PINCH ME with slightly varied components.

The delirium prevention and treatment strategy advocated by NICE (2010a) has the same underlying principles and includes elements of the PINCH ME mnemonic. NICE (2010a) advocate multicomponent packages of personalised interventions delivered by the MDT and being made central to care planning and delivery. NICE (2010b) provides a care plan template for the prevention and management of delirium. Component parts consist of environmental considerations, orientation strategy, cognitive stimulation and investigations for underlying physical factors.

There is scope for the PINCH ME mnemonic to be adapted in different clinical settings to include not only the highly prevalent causes of delirium, but to add specialty/clinical area specific components. An example of other potential components of PINCH ME is shown in Figure 1 (Let's Respect 2014). Local adaption may support and promote MDT working.

Figure 1 Other potential components of PINCH ME



Example of PINCH ME application in practice

(please not this is a fictitious presentation and scenario)

Elizabeth is a 78 year old lady who was admitted to a care of the elderly ward following a 5 day history of agitation, increased confusion and verbal aggression towards her home care team. Elizabeth had a diagnosis of dementia (type unspecified) and had been living with a care package in her own home for two years. Having no family, Elizabeth had formed a good relationship with her carers.

Elizabeth's carers reported that at the start of the week she was her "usual self" but had become increasingly disorientated and confused: getting upset with the care staff when they have been trying to help her with her meals and personal care. This had escalated over 5 days to the point where the care staff were unable to meet her needs. They also noticed that Elizabeth was not eating or drinking as much as usual and appeared to be having difficulty going up and down the stairs: becoming short of breath and coughing a little. Concerned for her wellbeing the carers promptly informed her GP who arranged admission to hospital for further investigation after visiting her at home.

On arrival to hospital, Elizabeth became increasingly confused and agitated, pushing staff members away with force and shouting out at them. Staff observed her appearing frightened and talking when no one else was present. Initial differential diagnosis of progression of dementia was considered alongside delirium superimposed on dementia. It was paramount to ensure a robust assessment was undertaken as treatment and care options would be influenced by it.

Elizabeth's assessment was undertaken involving the multidisciplinary care team (MDT) including the hospital psychiatric liaison service and Elizabeth's home carers. The PINCH ME

mnemonic was applied to help guide this assessment.

Pain: Pain rating scales were utilised alongside Elizabeth's verbal reports. No pain was identified but this was continually assessed and reviewed as pain might be under reported.

INfection: Elizabeth was diagnosed with a lower respiratory tract infection and commenced on oral antibiotics

Nutrition: A dietitian assessed Elizabeth's nutritional status due to her recent reduction in appetite and low body mass index (found on admission). Appropriate supplements commenced and a plan put in place for regular dietetic reviews.

Constipation: Elizabeth's carers provided vital information about Elizabeth's usual bowel pattern and continence so any changes could be noticed and addressed promptly

Medication: A full medication review was undertaken by the ward Doctor and Pharmacist. Elizabeth's carers assisted with information regarding concordance

Environment: Staff were aware that Elizabeth was not in her usual home environment which could cause distress. Staff helped to orientate Elizabeth to the ward in conversations and her carers brought her familiar items from home. Attention was paid to reducing over simulating or frightening noises and lighting was kept in line with normal day light hours to help promote sleep. When talking to Elizabeth, staff introduced themselves and where they were to help reassure and help orientate Elizabeth.

The MDT agreed on a diagnosis of delirium superimposed on dementia. With careful prescribing of antibiotics, regular reviews by the psychiatric liaison team, support from nursing staff with reorientation, personal care needs and increased nutritional support, Elizabeth became more orientated over the course of a few days and following review was discharge home with a short term increased care package and GP follow up.

Discussion

Delirium and DSD pose a significant challenge for nurses. Spanning the gap between mental health and physical health specialties and care provision, delirium and DSD present with inseparable components of mental and physical healthcare requirements. Since holistic nursing care encompasses the individual's mind, body and spirit (McEvoy and Duffy 2008), delirium is a 'holistic' illness. Delirium demands all nurses and members of the MDT to provide a truly holistic, individualised and inclusive approach to care. Assessing and treating either the psychological or the physical components in isolation may not appropriately treat the delirium or improve patient outcomes.

Conclusion

Nurses can begin conversations about DSD. Observing patient behaviour, assessing care needs and keeping accurate documentation is an important start. Using this information to consider the PINCH ME mnemonic and make appropriate and informed referrals to other members of the MDT may promote awareness and comprehensive review of a potential delirium or DSD, improving patient outcomes and providing robust, person-centred care. There is scope for the PINCH ME mnemonic to be adapted locally and become focused for specialist care settings while consistently promoting common underlying causes of delirium, and, subsequently DSD.

Implications for practice

- Delirium is common and can be fatal
- Distinguishing between delirium superimposed on dementia and dementia is challenging but essential
- Timing and nature of onset of changes in presentation is key for identification. Delirium presentation is often acute but can persist if untreated
- A comprehensive assessment involving the MDT is central to care provision

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