Delirium
RCN Congress
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Learning Objectives

1. To gain understanding of the research project into Delirium and relationship centred care in Dementia

2. To understand the differences and relationship between delirium, depression and dementia

3. To be able to recognise cognitive changes that are not a normal part of ageing

4. To gain knowledge on how to identify and reduce the risk of delirium

5. To gain knowledge of the long term prognosis for those with delirium

6. To understand how to support those patients with delirium and their carers

7. To gain knowledge of the Delirium Champions Programme
History

- Celsus originally used the term in the 1st century (Lindesay 1990)
- Before that Hippocrates had written about “phrenitis” and “lethargus”, which we know term as hyperactive and hypoactive.
- The term delirium originates from the Latin deliro-delirare (de-lira, to go out of the furrow)- meaning, to deviate from a straight line, deranged, crazy, to be silly, to dote, to rave (Andrews & Allen, 1879)
- Celsus was likely the first reporter of non-febrile causes of delirium
Impact on patient outcomes

- Patients with delirium experience an increased length of stay, increased risk of mortality and increased risk of institutionalisation.
- Hospital mortality rates range from 6-18% and are twice that of matched controls.
- Higher risk of complications such as pressure sores and falls.
- One year mortality rate 35-40% in patients living with dementia.
- Up to 60% suffer persistent cognitive impairment, 3 times more likely to develop dementia.
What is Delirium?
My role is a Dementia Clinical Nurse Specialist in a busy district general hospital. A primary part of my role has been to lead on raising awareness of delirium.

**NICE GUIDANCE 2010**

**What is Delirium?**

It is an acute, fluctuating syndrome of disturbed consciousness, attention, cognition and perception [NICE, 2010a; Inouye, 2014; Kalish, 2014].

The National Audit of Dementia Results (2016) for PAH highlighted poor recognition and screening of delirium.

Currently 25-30% of our hospital beds are occupied with someone living with dementia.
What is already known?

- Common among older people admitted to acute hospitals, 10-31% at admission, 3-29% during admission (Travers et al 2013)
- Limited research into the complications patients with dementia experience in hospital (Draper et al 2011)
- Systematic review identified prolonged length of stay, functional decline, adverse events, risk of institutionalisation (Mukadam & Sampson 2011)
- Nurses lacking in knowledge about the negative results associated with delirium and the importance of routine assessment (Flagg et al 2010)
- Burdensome and psychologically distressing for formal and informal caregivers, little understanding or knowledge of delirium (Paulson et al 2016)
- Little research exploring the relationship between nursing staff and caregivers in supporting person-centred, relationship centred care in delirium superimposed on dementia
Study Aims and Objectives

• Explore the experiences and perspectives of family carers who are caring for someone with dementia and delirium in the acute hospital
• Explore the experiences and perspectives of family carers who have cared for someone with dementia and delirium
• Understand what family carers know about delirium when superimposed on dementia
• Understand currently what role health care professionals play in supporting family carers with relatives with dementia and delirium
Delirium Research

- Significant number of patients with delirium superimposed on dementia in hospital
- Greater impact on quality of life, risk of deconditioning, institutionalisation, mortality
- Additional distress and burden for carers
- One dementia researcher for every 4 researchers
- Staff report lack of education in delirium, difficulties in identifying particularly hypoactive delirium
- Symptoms of delirium at end of life distressing

Next steps
A protocol for a systematic review (registered on Prospero)
The 3 D’s
Delirium, Dementia and Depression

- Delirium, Dementia and Depression are different
- Signs and Symptoms are alike
- Serious implications if misdiagnosis occurs
- **Delirium is a medical emergency**
- If not detected, treated and managed appropriately can be fatal
- Definition of Delirium-syndrome involving the sudden deterioration of mental functioning, triggered by acute illness of the body or brain, acute injury or drug intoxication (Manning et al 2013)
- Definition of Dementia- group of conditions that cause a decline in brain function and difficulties with skills (Alzheimer's Society 2015)
- Definition of Depression-Broad diagnosis in which low mood and/or loss of interest or pleasure in most activities are key features (Polson et al 2015)
# The 3 “Ds”

<table>
<thead>
<tr>
<th>Feature</th>
<th>Delirium</th>
<th>Dementia</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Sudden</td>
<td>Insidious</td>
<td>Gradual</td>
</tr>
<tr>
<td>Fluctuations</td>
<td>Yes – over hrs</td>
<td>Not usually</td>
<td>Situational</td>
</tr>
<tr>
<td>Duration</td>
<td>Hours – 1 month</td>
<td>Months - years</td>
<td>Weeks - years</td>
</tr>
<tr>
<td>Cause</td>
<td>Acute illness - reversible</td>
<td>Chronic degeneration</td>
<td>Reactive / biochemical</td>
</tr>
<tr>
<td>Conscious level</td>
<td>Abnormal</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>Memory</td>
<td>Impaired</td>
<td>Impaired</td>
<td>May refuse to answer</td>
</tr>
<tr>
<td>Conversation</td>
<td>Often slow, inappropriate</td>
<td>Word finding difficulties</td>
<td>Sparse</td>
</tr>
<tr>
<td>Orientation</td>
<td>Varies</td>
<td>Impaired</td>
<td>Normal</td>
</tr>
<tr>
<td>Hallucinations</td>
<td>Often present</td>
<td>Rarely present</td>
<td>Rarely present</td>
</tr>
<tr>
<td>Night-time</td>
<td>Worse</td>
<td>Can be worse</td>
<td>No effect</td>
</tr>
</tbody>
</table>
## Memory: Age Effects

<table>
<thead>
<tr>
<th>Description</th>
<th>Age effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working memory</strong></td>
<td></td>
</tr>
<tr>
<td>information for rapid</td>
<td>moderate decrease</td>
</tr>
<tr>
<td>access</td>
<td></td>
</tr>
<tr>
<td><strong>Remote memory</strong></td>
<td></td>
</tr>
<tr>
<td>implicit</td>
<td>increases</td>
</tr>
<tr>
<td>instinct</td>
<td></td>
</tr>
<tr>
<td>procedural</td>
<td>increases</td>
</tr>
<tr>
<td>know-how</td>
<td></td>
</tr>
<tr>
<td>autobiographical</td>
<td>preserved</td>
</tr>
<tr>
<td>personal knowledge</td>
<td></td>
</tr>
<tr>
<td>semantic</td>
<td>increases</td>
</tr>
<tr>
<td>general knowledge</td>
<td></td>
</tr>
<tr>
<td><strong>Recent memory</strong></td>
<td></td>
</tr>
<tr>
<td>episodic</td>
<td>decreases: most</td>
</tr>
<tr>
<td>events</td>
<td>affected</td>
</tr>
<tr>
<td>prospective</td>
<td>decreases</td>
</tr>
<tr>
<td>remember to do</td>
<td></td>
</tr>
<tr>
<td>something</td>
<td></td>
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</tbody>
</table>
Episodic Memory

• Definition—a type of long term memory that involves conscious collection of previous experiences tighter with their context

• Ability to recall specific events

• Most sensitive type of memory to aging

• Main component is the recollection, recollection is the retrieval of contextual information of a specific event

• Degree of age effect:
  – Free recall > cued recall > recognition recall
Attention and Memory

- Forgetfulness in healthy people is often due to inattention.
- Hippocampus encoding is aided by prefrontal cortex
- Effort to focus attention will improve episodic memory
- “Top down processing”
What’s Normal?

• What’s his name?
• What’s that called?
• Where did I park?
• Where did I put those?
• Did I tell you this already? Yes.
• Did I ask this already? Yes.
• Did you tell me this already? Yes.
What’s Not Normal

• Getting lost in a familiar place.
• Not being able to follow a direction/recipe
• Telling the same story more than twice without asking.
• Asking the same question more than twice.
• Losing interest in conversation, going out, hygiene, other people
Clinical factors contributing to delirium

- cognitive impairment and/or disorientation
- dehydration and/or constipation
- hypoxia
- infection
- immobility or limited mobility
- pain
- multiple drugs
- poor nutrition
- sensory impairment
- poor sleep patterns and sleep hygiene (NICE 2010)
Long term prognosis following delirium

- Little known about long term prognosis
- Independent predictor of increased mortality
- Delirium appears to be an important predictor of adverse outcomes up to 3 years after diagnosis (McCusker 2003, Inouye 2014)
- Delirium gets better when the cause is treated
- You can recover very quickly but can take days/weeks
- People with dementia can take a particularly long time to recover
- May be left with unpleasant and frightening memories (PTSD)
- More likely to have delirium again if you become medically unwell
- Relationship between delirium in the ICU and long term cognitive impairment (Salluh et al 2015)
How to identify and reduce the risk of delirium
Supporting families

- Can be highly distressing, families may be anxious about the cognitive and functional decline, some questions they may ask
  - What is delirium
  - Why has my relative developed delirium
  - How can I tell if they have delirium or if they are just very ill
  - How long does delirium usually last
  - Will it have any lasting effects on their physical and mental health?
  - Is it a psychiatric illness
  - How will it be treated
  - What can I do to help  

https://youtu.be/9G3yJNOGCok
DELIRIUM CHAMPIONS

- New initiative by the RCN Older Peoples Forum, (supported by my Improvement Network)
- 1200+ Delirium Champions
- 4000 Audience reach of Delirium resources
- 44% of Delirium Champions are community based
What Is Delirium?
References

• Alzheimer's Society (2015) Online resource
References Continued

• Manning, W (2013) Delirium, (2nd ed), Stirling, University of Stirling/Hammond Press


