

# Delirium

## RCN Congress Liverpool 2019

Caroline Ashton-Gough



# 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 1<sup>st</sup> 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

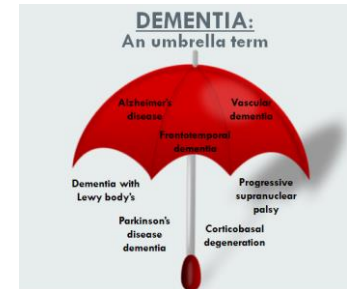
- Patients with delirium experience an increased length of stay, increased risk of mortality and increased risk of institutionalisation
- Hospital mortality rates range from 6-18% and are twice that of matched controls.
- Higher risk of complications such as pressure sores and falls
- One year mortality 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?



# BACKGROUND TO RESEARCH



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”

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

# Memory: Age Effects

	Description	Age effects
<b>Working memory</b>	information for rapid access	moderate decrease
<b>Remote memory</b>		
-implicit	instinct	increases
-procedural	know-how	increases
-autobiographical	personal knowledge	preserved
-semantic	general knowledge	increases
<b>Recent memory</b>		
-episodic	events	<u>decreases: most affected</u>
-prospective	remember to do something	decreases



# Episodic Memory

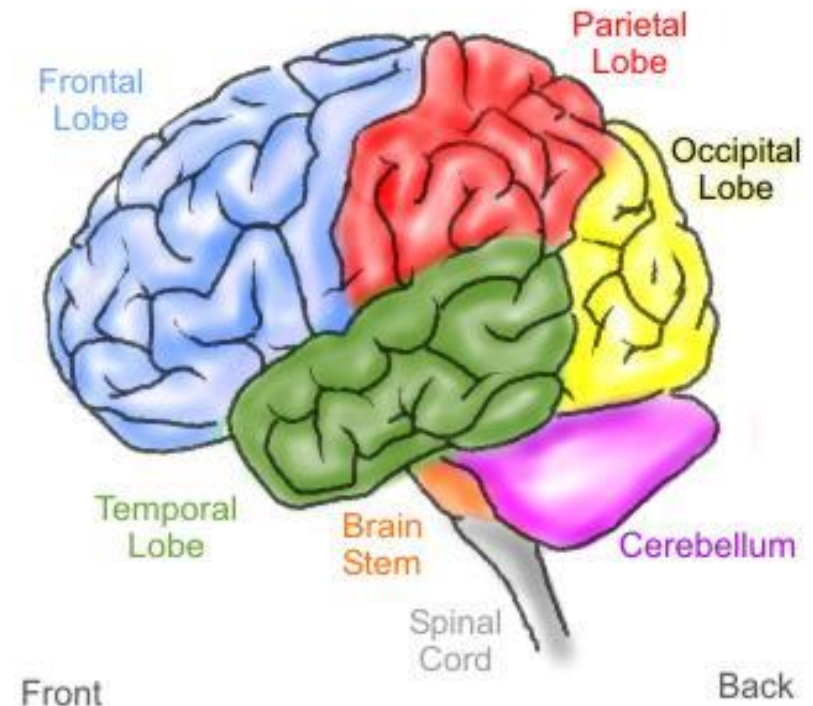
- Definition-a type of long term memory that involves conscious collection of previous experiences tighter with their context
- Ability to recall specific events
- Most sensitive type of memory to aging
- Main component is the recollection, recollection is the retrieval of contextual information of a 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”

Regions of the Human Brain



# 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)



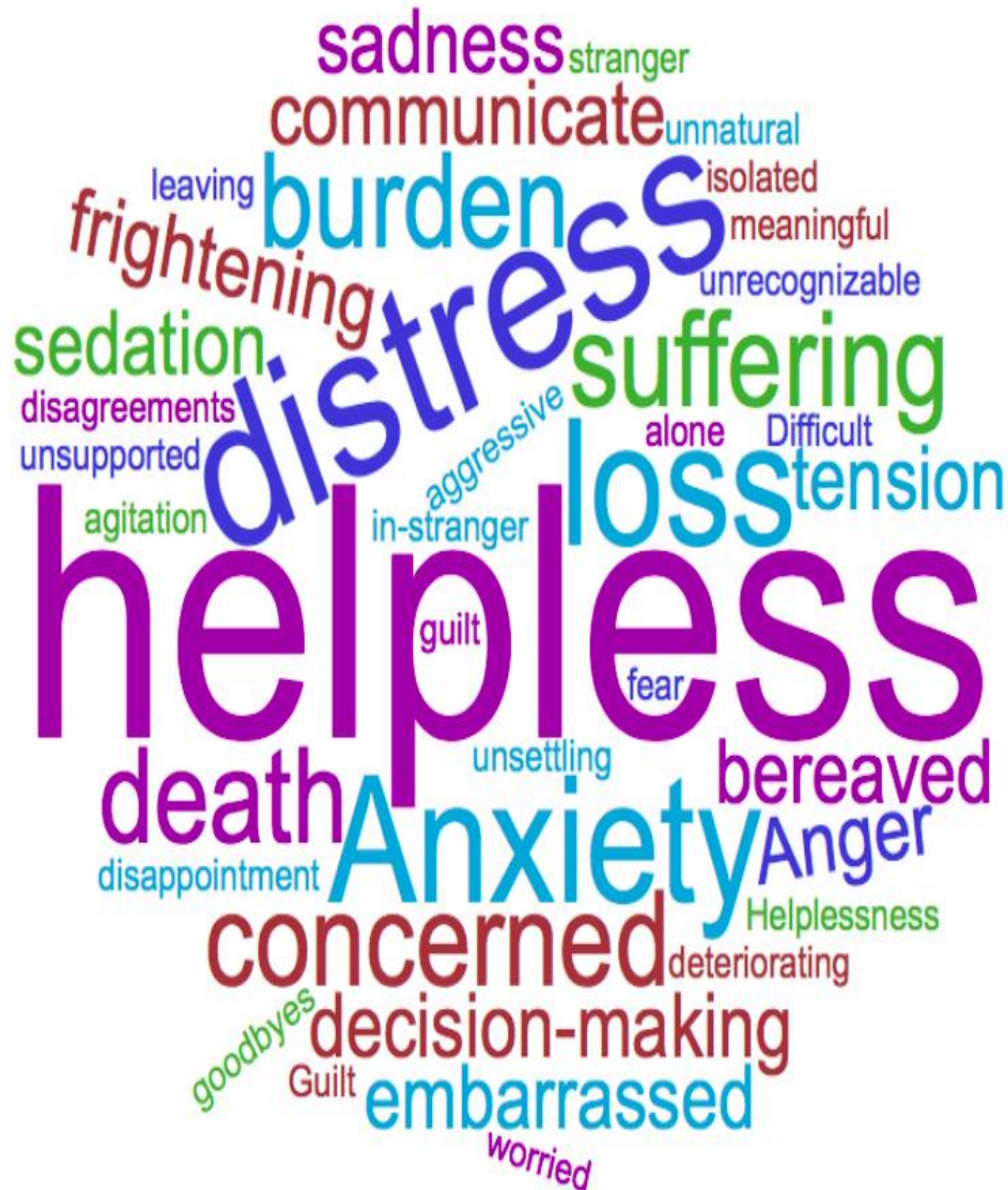
# Long term prognosis following delirium

- 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 like 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
- Andrews, & Allen, E. (1879). *Harpers' Latin dictionary. A new Latin Dictionary founded on the translation of Freund's Latin-German lexicon, edited by E. A. Andrews, LL.D. Revised, enlarged, and in great part rewritten by Charlton T. Lewis and Charles Short.* Draper B, Karmel, R, Gibson D, et al. 2011 The Hospital Dementia Services Project: age differences in hospital stays for older people with and without dementia. *International Psychogeriatric* . ;23:1649-58.
- Flagg B, Cox L, Mc Dowell S, Mwose JM, Buelow JM (2010) Nursing identification of delirium, *Clinical Nurse Specialist* 24, 260-266.
- Flick, U. 2009. *An introduction to qualitative research*, London, Sage.
- Lindesay (1990)
- Jorge et al (2015) Outcome of delirium in critically ill patients: systematic review and meta-analysis , *BMJ Open*
- Lindesay, J. (1999). The Concept of Delirium. *Dementia and Geriatric Cognitive Disorders*, 10(5), 310-314. doi:10.1159/000017160





# References Continued

- Manning, W (2013) Delirium, (2<sup>nd</sup> ed), Stirling, University of Stirling/Hammond Press
- McCusker, J (2003) Geriatrics and Ageing Vol 6, No 10, pg 22-27
- Mukadam N, Sampson E L. 2011. A systematic review of the prevalence, associations and outcomes of dementia in older general hospital inpatients. *International Psychogeriatric*;23: 344-55.
- Ormston, R., Spencer, L., Barnard, M. & Snape, D. 2014. The foundations of Qualitative Research. *In: Ritchie, J., Lewis, J., McNaughton*
- Paulson CM, Monroe T, Mcdougall JR, Fick, D (2016) A family focused delirium education imitative with practice and research implications, *Gerontol Geriatric Educ* 37(1):

