



Overview of Delirium & the Older Adult

Education for Health Care Professionals

Part 1: Delirium Defined



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What is Delirium?



- Delirium is described using the following criteria:
 - disturbance of consciousness with reduced ability to focus, sustain, or shift attention
 - a change in cognition (memory, language, or orientation) or development of a perceptual disturbance
 - the disturbance develops over a short period of time (hours to days) and tends to fluctuate during the day
 - there is evidence from the history, physical, or laboratory findings that the disturbance is caused by direct physiological consequences of a general medical condition

[\(SFH no date\)](#)

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Delirium Sub-Types

Delirium is categorized into three sub-types characterized by:



- **Hyperactive:** increased motor activity, restlessness, agitation, verbalization, hallucination, delusion, and inappropriate behaviour.



- **Hypoactive:** lethargy, drowsiness, withdrawal, indifference, and decreased motor activity.
- **Mixed:** fluctuations in the features of the above two sub-types.

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Delirium Incidence



- Studies have found that in general medical and geriatric wards, the prevalence of delirium incidence at rates of 29–64%.
- The prevalence of delirium in the community setting is relatively low (1–2%), but its onset usually brings the patient to emergency care.
- On presentation to the emergency department, delirium is present in 8–17% of all seniors and 40% of nursing home residents.

(Inouye 2014)

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Delirium in ICU



- In Ouimet's study it was revealed that delirium occurred in 31.8% of 764 individuals studied in the Intensive Care Unit.
- In this study they found that the risk of delirium was associated with a history of hypertension, alcoholism and severity of illness but not with age or corticosteroid use.
- Sedatives and analgesics increased the risk of delirium when used to induce coma and not otherwise.
- Delirium was linked to longer ICU stay, longer hospital stay, higher ICU mortality, and higher hospital mortality.

(Ouimet 2007)

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Delirium Associated with Procedures



- 41-56% of people 60 years and over develop delirium after hip fracture surgery.
- 15% of people 60 years and over develop delirium after elective hip surgery.
- 32% of people 65 years and over develop delirium after coronary artery bypass surgery.
- 83% develop delirium when mechanically ventilated.

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Delirium in LTC & Palliative Care



- Incidence in long term care and post acute care ranges from 1% to 60%. ([Kalish,2014](#))
- Patients typically present with the hypoactive form of delirium in long term care.
- The highest incidence rates were observed in the intensive care unit, postoperative, and palliative care settings. ([Inouye SK 2014](#))
- As many as 80% of people develop delirium as they near death. ([Alagiakrishnan 2017](#))

Under Recognition

Despite its importance, delirium is often under-recognized in the hospital setting. Studies have shown that clinicians caring for the patient do not recognize delirium in up to two thirds of cases. ([Inouye 2014](#))

- Delirium is more likely to be under-recognized when the:
 - Person is:
 - hypoactive
 - 80 years and older
 - has visual impairment
 - has dementia
 - Caregivers:
 - that lack training/education
 - are unaware that delirium is a potential medical emergency
 - attribute changes to dementia
 - assume that “older people are expected to get confused”
 - System/processes:
 - lack continuity of care
 - lack of quality improvement “standard measures” and educational programs

Risk Factors >>

Certain underlying conditions increase the risk of delirium:

- advanced age
- underlying brain diseases such as dementia, stroke, or Parkinson disease, particularly when there are current problems with memory
- use of multiple medications (particularly psychiatric drugs and sedatives), or multiple medical problems
- sudden withdrawal of a regular medication or cessation of regular alcohol use
- frailty, malnutrition, immobility
- advanced cancer

[\(Francis 2014\)](#)

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Risk Factors

Certain underlying conditions increase the risk of delirium:

- undertreated pain (although excessive use of opioid pain medication for pain control can also impair brain function)
- immobilization, including use of physical restraints
- use of bladder catheters
- interventions, including diagnostic tests
- limb/hip fractures
- admission to Intensive Care, being ventilated
- poor eyesight or hearing
- sleep deprivation
- organ failure (chronic lung disease, heart, kidney, or liver failure)

[\(Francis 2014\)](#)

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