

Delirium



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AKERSHUS UNIVERSITETSSYKEHUS

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Legen Rune Larsen (60) var sikker på at han skulle kokes da han ble innlagt på sykehuset



Foto: Marita Aarekol

SPECIAL ARTICLE

acta Anaesthesiologica Scandinavica

Just a little delirium- A report from the other side

Rune Arild Larsen 

Acta Anaesthesiol Scand. 2019

Disposisjon

- **Kva er delirium?**
- **Kor vanleg er delirium?**
- **Risikofaktorer**
- **Korleis er delirium og demens knytta saman?**
- **Korleis handtere delirium?**
- **Kva skjer i hjernen ved delirium (og korleis finne ut av det)?**



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Kva er delirium?

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DSM-5 criteria for delirium

A	A disturbance in attention (i.e., reduced ability to direct, focus, sustain, and shift attention) and awareness (reduced orientation to the environment).	→	Attention Awareness
B	The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.	→	Acute change Fluctuate
C	An additional disturbance in cognition (e.g. memory deficit, disorientation, language, visuospatial ability, or perception).	→	Disturbance in cognition
D	The disturbances in Criteria A and C are not better explained by a pre-existing, established or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal, such as coma.	→	Not «only» dementia
E	There is evidence from the history, physical examination or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal, or exposure to a toxin, or is due to multiple etiologies	→	A direct consequence of another medical condition

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Kor vanleg er delirium?

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Delirium in an adult acute hospital population: predictors, prevalence and detection

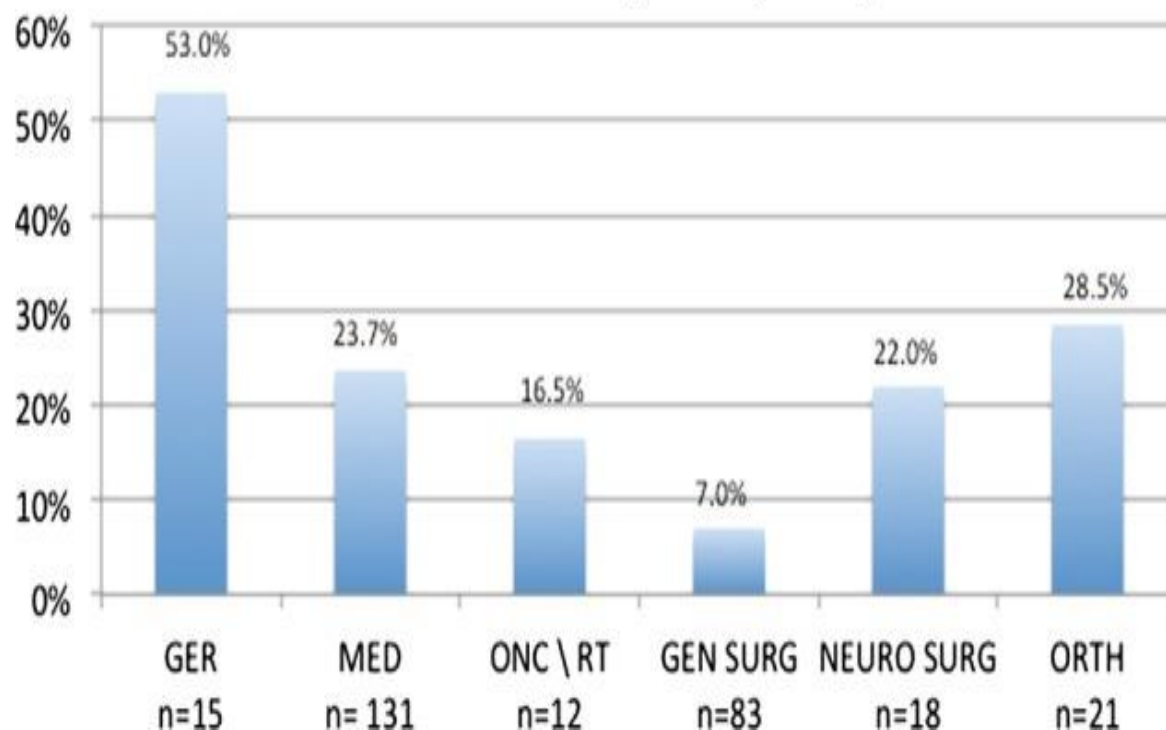
-Cork University Hospital, Ireland: 407 acute adult inpatients beds

-15th of May 2010 were all patients assessed for delirium

-19,6 % had delirium

Only 43,6% had delirium or one of its synonyms documented in the case notes!!

Delirium Prevalence by Ward (n=280)



3

Risikofaktorer

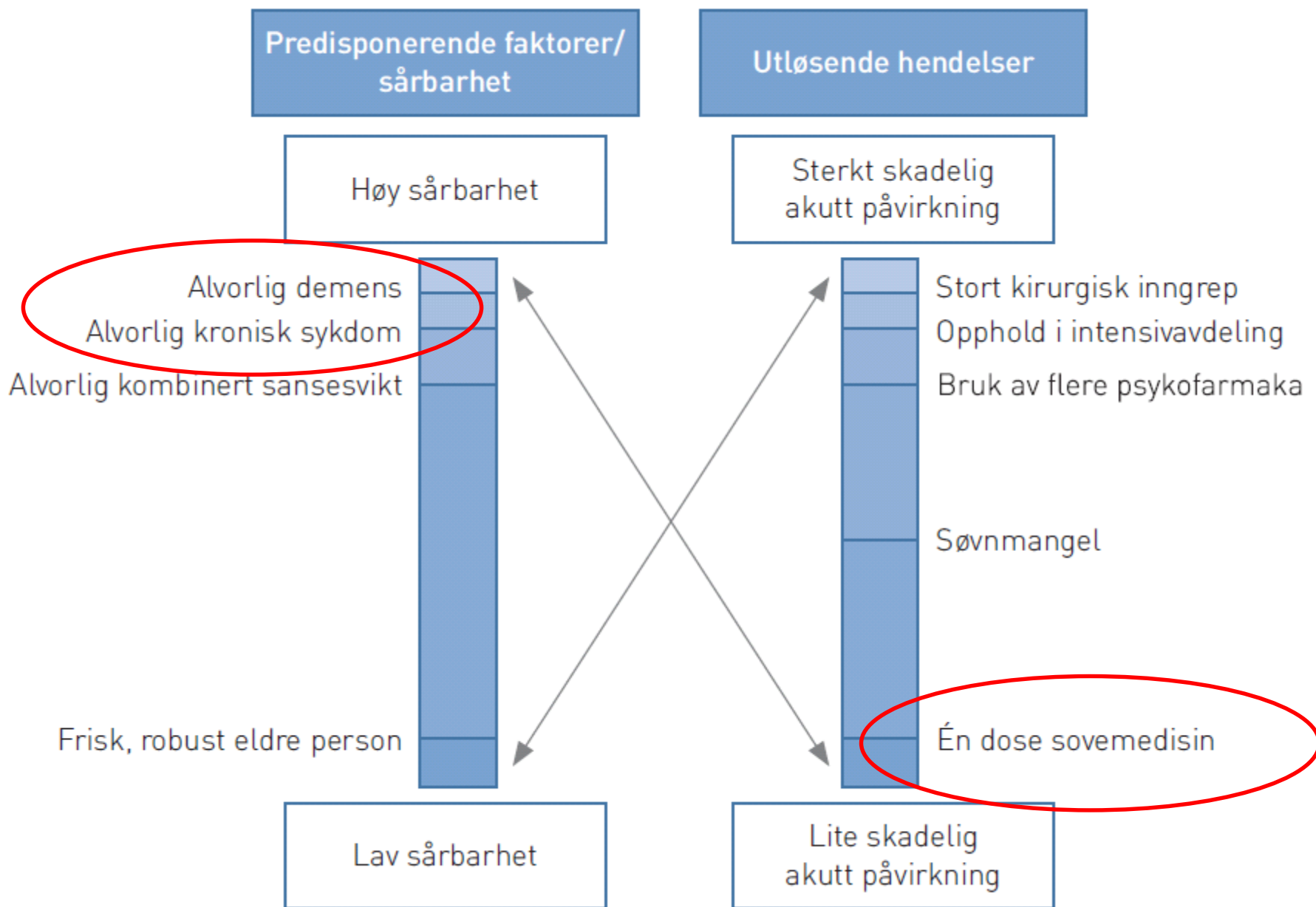
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Korleis er delirium og demens
knytta saman?

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Delirium is a strong risk factor for dementia in the oldest-old: a population-based cohort study

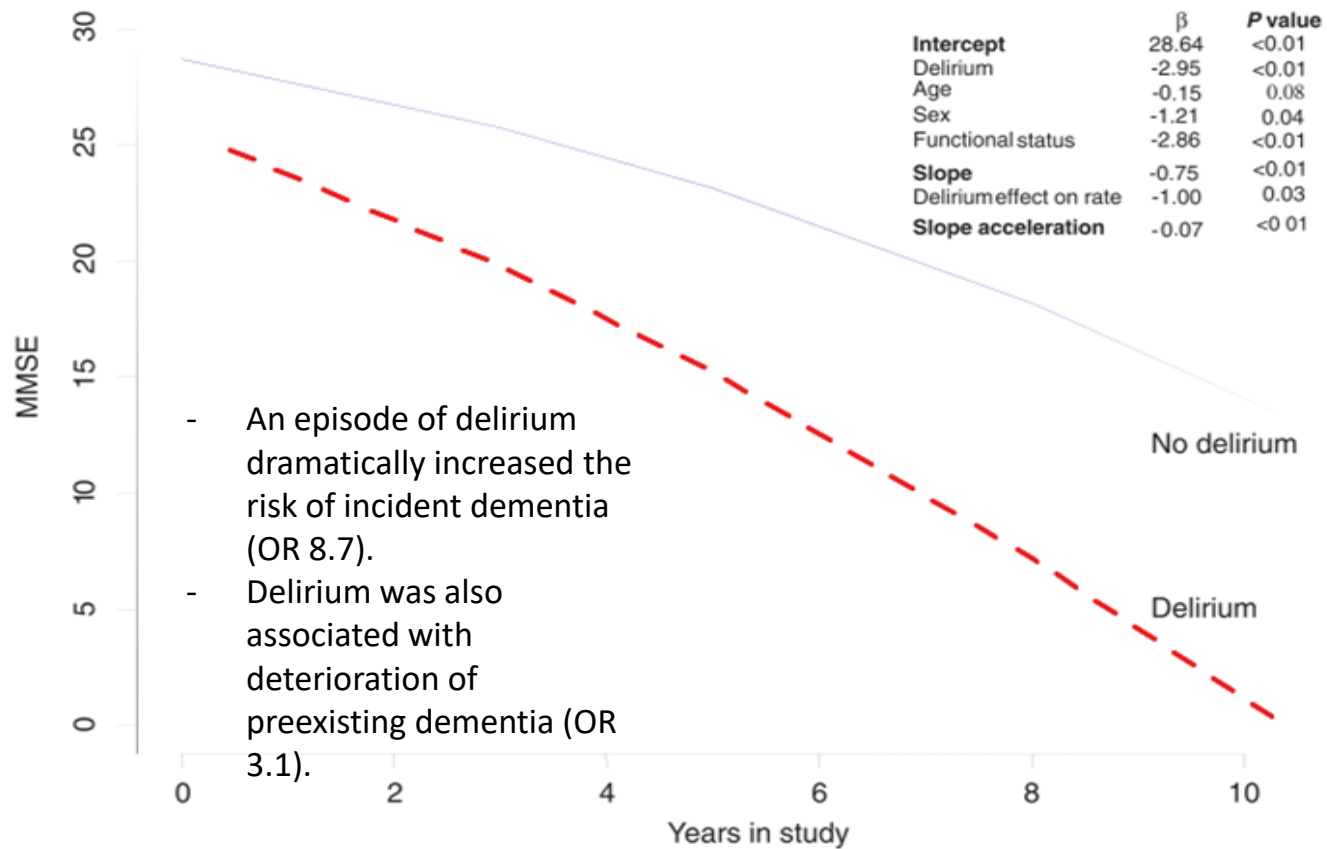




Figure 1: Infographic showing patient recruitment and study timeline

GP=general practitioner. HABAM=Hierarchical Assessment of Balance and Mobility. MDAS=Memorial Delirium Assessment Scale. OSLA=Observational Scale of Level of Arousal. TICS-m=modified Telephone Interview for Cognitive Status.

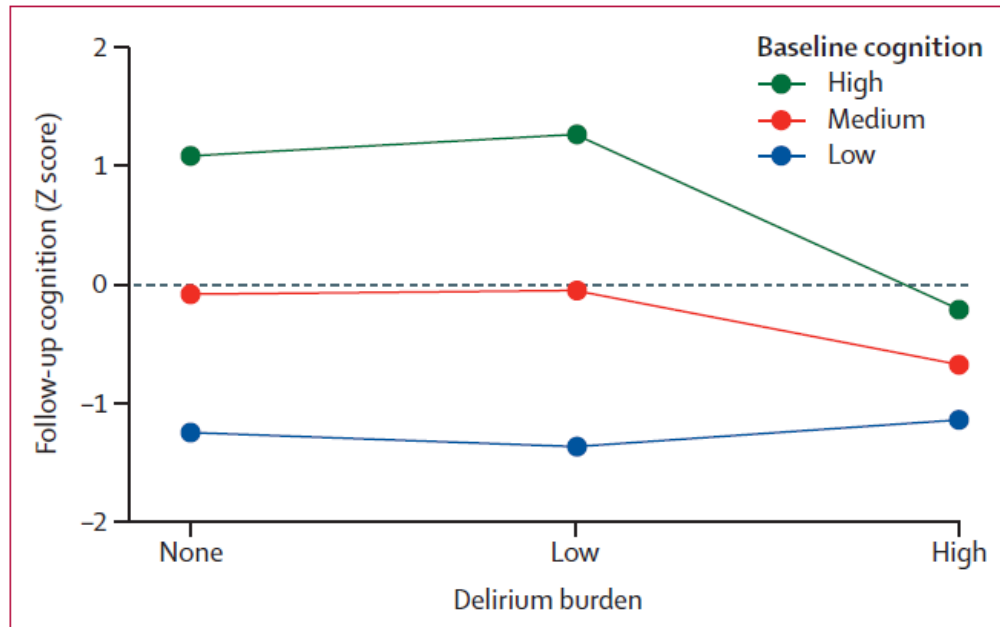


Figure 3: Association between delirium burden and follow-up cognition by baseline cognition

Potential mechanisms for how delirium could lead to dementia

1. Delirium unmasks unrecognised or preclinical dementia

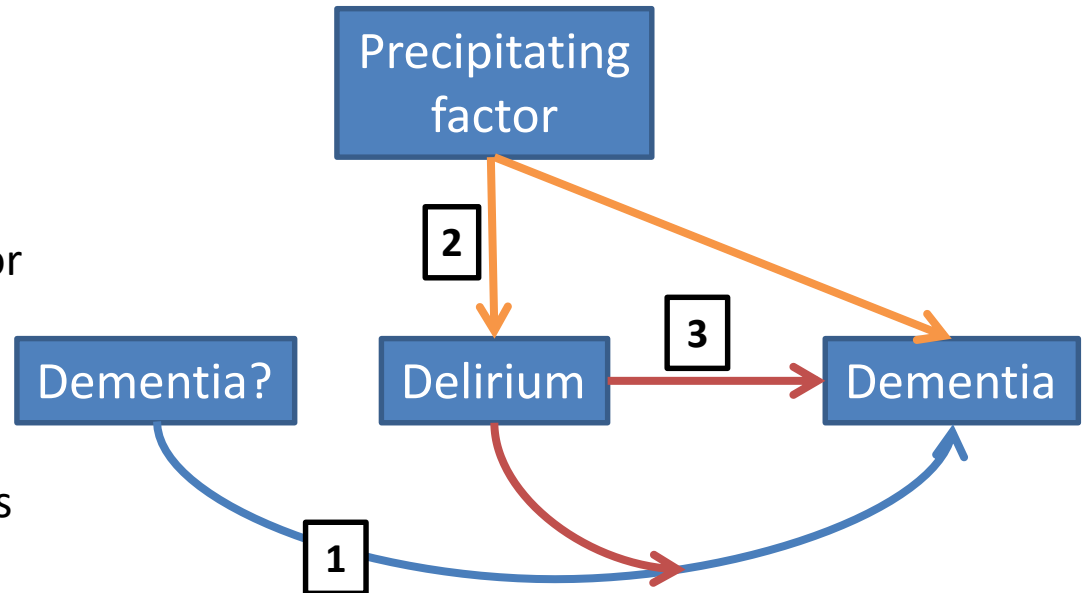
Dementia pathology responsible for further decline

2. Common shared precipitating factor

Sepsis, surgery, drugs

3. Delirium independently contributes to dementia

Pathophysiology unknown



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Korleis handtere delirium?

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Strong evidence supporting **preventing** delirium without drugs

- **Multi-component interventions are the best and most effective strategy** to prevent delirium in hospitalized patients

↓ **delirium 30-50%**

↓ **fall 60%**

Young, 2010

Hshieh, 2015

Burton, 2021



**Cochrane
Library**

Cochrane Database of Systematic Reviews

Non-pharmacological interventions for preventing delirium in hospitalised non-ICU patients (Review)

Burton JK, Craig L, Yong SQ, Siddiqi N, Teale EA, Woodhouse R, Barugh AJ, Shepherd AM, Brunton A, Freeman SC, Sutton AJ, Quinn TJ

- **Treatment** of delirium without drugs is less documented



Be delirium aware



Limited mobility

Encourage the person to walk and do active exercises



Cognitive impairment/disorientation

Use clock and calendar
Talk to the person to help orientate them
Hearing aids and glasses



Poor food and fluid intake

Encourage to eat and drink



Pain

Look for signs of pain, particularly if the person has dementia
Make sure pain is well-managed



Medication

Review their medications



Surroundings

Keep the surroundings familiar
Avoid moving the person unnecessarily



Carers

Make sure support is provided by carers who are familiar to them



Catheters

Avoid using a catheter as far as possible



Disturbed sleep

Avoid disturbing the person during sleep periods



Constipation and urinary retention

Prevent/address constipation
Be aware of urinary retention

NICE guidelines, Young 2010

American Geriatrics Society Expert Panel on Postoperative Delirium in Older, Adults, 2015

Medikament	Dosering			
	Esther Oh, JAMA 2017	Fagprosedyre, helsebiblioteket.no	Metodebok OUS Ullevål (oppdatert 2019)	Scottish Delirium Association
Haloperidol = Haldol	0.25- 0.5 mg Kan gjentas hvert 30.min, maks 3-5 mg/24t	0.5-1 mg p.o./i.m Lavere dosering for de skrøpeligste	0.5 – 1 mg p.o eller i.m. max 2 mg /døgn. Til eldre og pasienter med demens kan 0.25 - 0.5 mg være tilstrekkelig første døgn.	0.5 - 1mg po, max 2mg/24t 0.5 mg IM, max 2mg/24
Olanzapine = Zyprexa	2.5 - 5 mg x 2	5-10 mg vesp p.o./i.m		
Risperidone = Risperdal	0.5 - 1 mg x 2	0.25 - 0.5 mg x2	0.25 - 1 mg x2 p.o.	
Quetiapine = Seroquel	12.5 – 25 mg x 2	50-100 mg / døgn p.o	Kan vurderes hos pas m/ LBD/Mb Park. 25–100 mg/d fordelt på to doser	
Dersom antipsykotika er kontraindisert (parkinsonisme, LBD) - alternativer				
Lorazepam = Temesta				0.5-1mg po, max 2mg/24t
Midazolam				2.5 mg IM max 7.5mg/24t
Heminevrin		300-600 mg vesp	(300 - 600 mg vesp)	
Melatonin/ ramelteon	3-5 /8mg ves	?		



World Delirium Awareness Day

15 March 2023

#WDAD2023