



University
of Glasgow

for prompt control of
senile agitation



THORAZINE[®]
chlorpromazine, S.R.P.1

"Thorazine" can control the agitated, belligerent senile and help the patient to live a composed and useful life.

 Smith Kline & French Laboratories
W. R. No. 112, P. 101



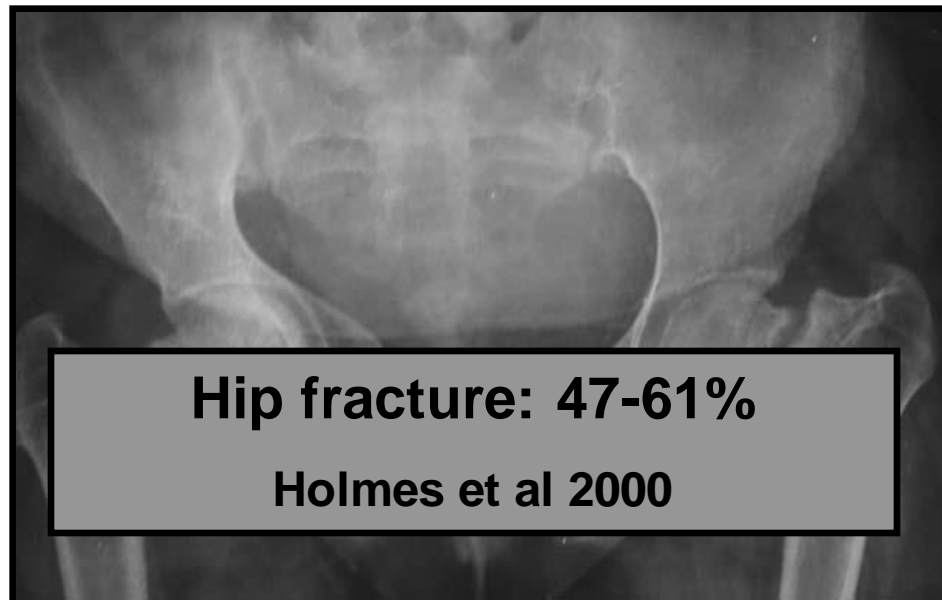
“In phrenitis ... the hands are waved before the face, hunting through empty space, or tearing chaff from the wall -- all such symptoms are bad and deadly.”

Hippocrates, ~400BC



“Sick people, sometimes in a febrile paroxysm, lose their judgment and talk incoherently... when the violence of the fit is abated, the judgment presently returns...”

Celsus, 1st Century





Mortality:
HR:1.95 (1.51-2.52)

Siddiqi et al 2006



Institutionalization:
OR:2.41 (1.77-3.29)

Siddiqi et al 2006



Functional decline:
RR:1.91 (1.30-2.80)

Rudolph et al 2010



Incident dementia:
OR:12.52 (1.86-84.21)

Witlox et al 2010



Prevention



Pharmacological

Treatment



Pharmacological



Non-pharmacological



Non-pharmacological



Cochrane Database of Systematic Reviews

Benzodiazepines for delirium

Lonergan E, Luxenberg J, Areosa Sastre A



Cochrane Database of Systematic Reviews

Antipsychotics for treatment of delirium in hospitalised non-ICU patients

Burry L, Mehta S, P



Cochrane Database of Systematic Reviews

Cholinesterase inhibitors for the treatment of delirium in non-ICU settings (Review)

Yu A, Wu S, Zhang Z, Dening T, Zhao S, Pinner G, Xia J, Yang D



Prevention



Pharmacological

Treatment



Pharmacological



Non-pharmacological



Non-pharmacological



Targets key delirium risk factors

Dehydration

Sensory loss (hearing aids, glasses)

Immobility

Use of sedatives

Cognitive re-orientation program

Delivered by elder life specialists, trained volunteers



Targets key delirium risk factors

Dehydration

Sensory loss (hearing aids, glasses)

Immobility

Use of sedatives

Cognitive re-orientation program

Delivered by elder life specialists, trained volunteers

Controlled trial

HELP ward : 2 standard care wards (n=852)

incident delirium

OR: 0.60 (95%CI:0.39-0.92)

economics: cost saving in longer term

Inouye et al

NEJM 1999



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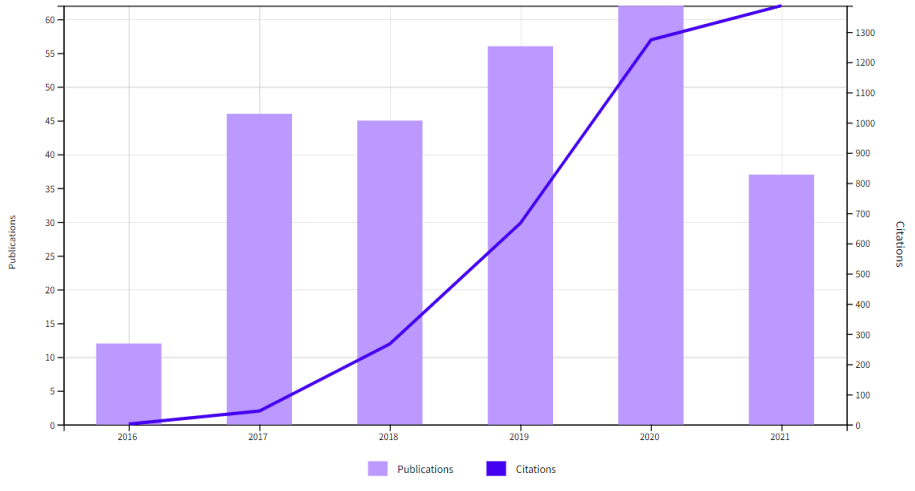
Interventions for preventing delirium in hospitalised non-ICU patients (Review)

Siddiqi N, Harrison JK, Clegg A, Teale EA, Young J, Taylor J, Simpkins SA

There is strong evidence supporting multi-component interventions to prevent delirium in hospitalised patients.

Times Cited and Publications Over Time

DOWNLOAD ▾

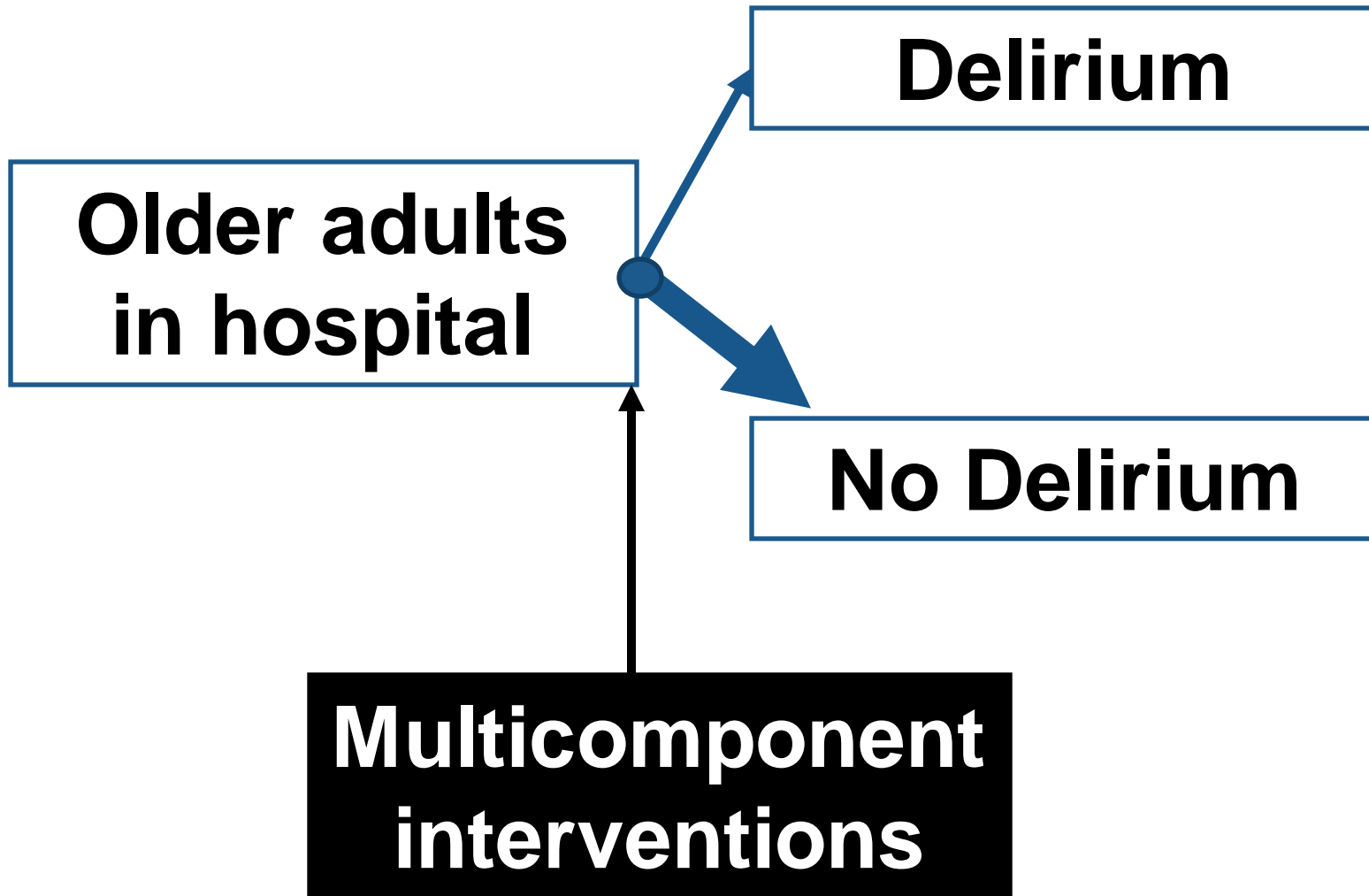


Healthcare Improvement Scotland | SIGN Evidence-based clinical guidelines

SIGN 157

Risk reduction and management of delirium

A national clinical guideline
March 2019

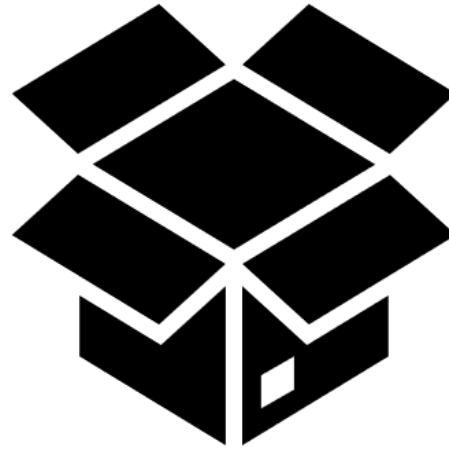
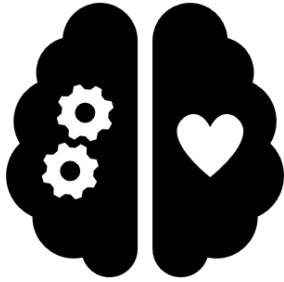


Hypoxia
Pain
Dehydration
Constipation
Malnutrition
Sleep disturbance
Infection
Sensory impairment
Polypharmacy



Table. The Most Common Components of Successful Delirium Prevention Programs

Anesthesia protocols
Assessment of bowel/bladder functions
Early mobilization
Extra nutrition
Geriatric consultation
Hydration
Medication review
Pain management
Prevention and treatment of medical complications
Sleep enhancement
Staff education
Supplemental oxygen
Therapeutic cognitive activities/orientation
Vision and hearing protocols



Combining clinical subject expertise with methodological expertise to retain relevance to practice

Table 1. Individual components of multi-component interventions

Study	Intervention Components																			
	Individualised care	Checklists/prosocol	Education/training ¹	Re-orientation	Attention to sensory deprivation	Familiar objects	Cognitive stimulation	Nutrition/hydration	Identification of infection	Mobilisation	Sleep hygiene	MDT-care ²	CGA ³	Oxygenation	Electrolytes	Pain control	Medication review	Mood ⁴	Bowel/bladder care	Post-operative complications
Abizanda 2011	#	#					#			#										
Bonaventura 2007			#	#	#	#		#		#	#									
Jefferies 2013				#						#										
Martinez 2012			#	#	#	#														
Hempenius 2013	#	#		#	#			#	#	#	#		#			#	#	#	#	
Lundstrom 2006	#	#	#					#	#	#	#	#	#	#		#				#
Marcantonio 2001	#																			

¹Education/training: structured education/training of staff or carers; ²MDT Multidisciplinary Team; ³CGA Comprehensive Geriatric Assessment; ⁴Mood: assessment for depression/anxiety

20 'components' in 7 trials
Updated search 14 trials (n=3693 participants)

Components for inclusion

Extracted verbatim description

Classification by 2 authors

Initially 20 identified as distinct – 12 components used in analysis

Excluded

Post-operative complications (single study)

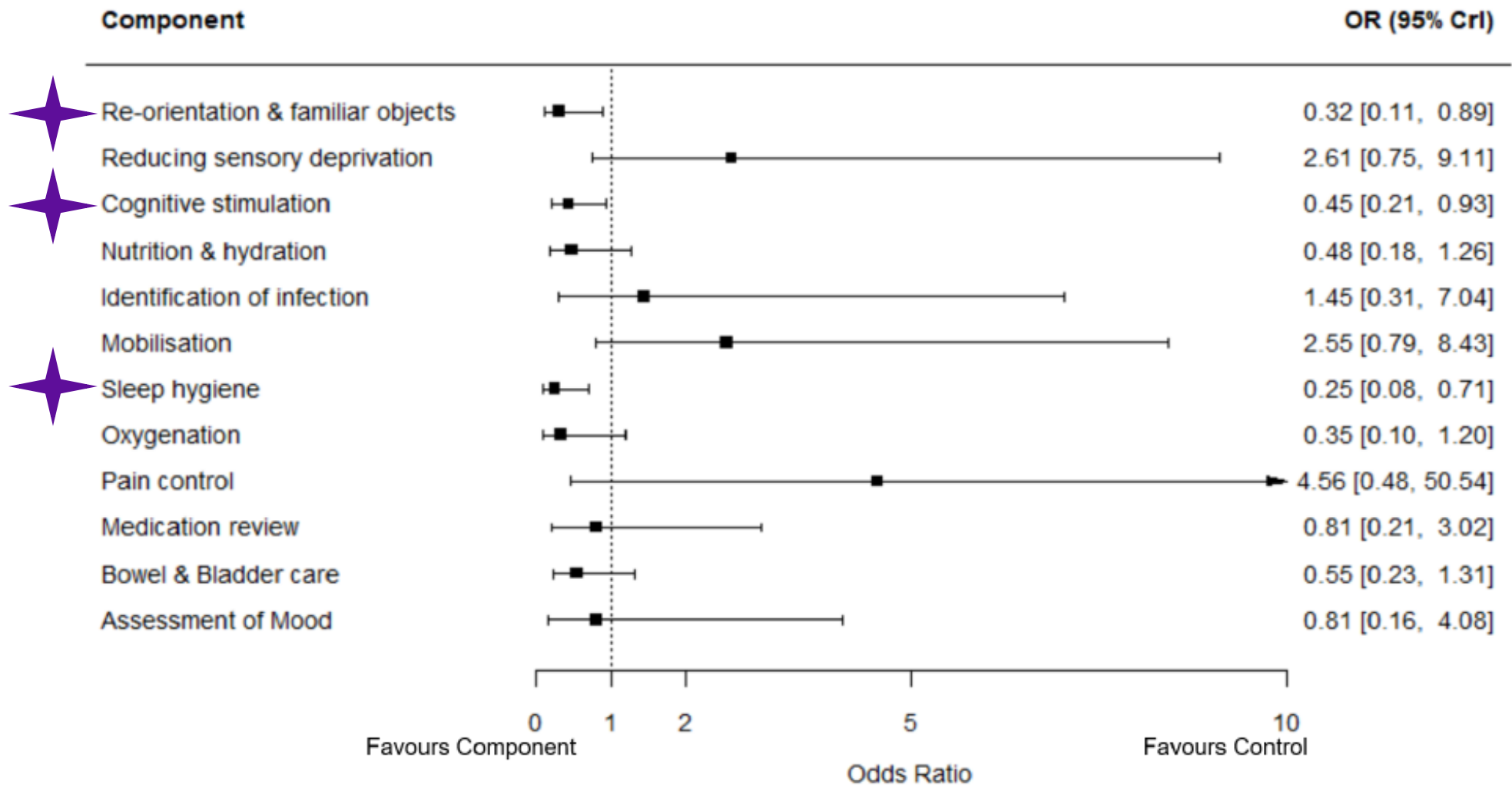
Combined with others

Electrolytes with Nutrition & Hydration; Familiar objects with Re-orientation

Characteristics associated with delivery of the intervention

Education; Family involvement; Multidisciplinary; Protocol/checklist; Tailored

Figure 6. Forest plot summarising component network meta-analysis results





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

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

🔍 Search...



21/531 NIHR Evidence Synthesis I brief

📄 Published: 30/07/2021 🕒 Read Time: 7 minutes 🔄 Version



**15TH ANNUAL MEETING OF THE
EUROPEAN
DELIRIUM ASSOCIATION**

XXVI CONGRÉS DE LA
SOCIETAT CATALANA DE
GERIATRIA I GERONTOLOGIA

NOVEMBER 17-18-19, 2021 • VIRTUAL





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Cochrane
Dementia and
Cognitive Improvement

Unpacking the black box of delirium prevention

Terry Quinn & Jenni Burton

Institute of Cardiovascular & Medical Sciences,
University of Glasgow



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