

Managing physical co-morbidities in dementia

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Brief

How to identify and diagnose co-morbid conditions in acutely ill patients with Alzheimer's disease



Real World



CONFUSION

What's going wrong?

theguardian

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Half of NHS hospitals failing to care for elderly

Care Quality Commission finds 'truly appalling and shocking' levels of dignity and provision of nutrition during spot visits

[Reality check: why are some hospitals failing older people?](#)

Denis Campbell and **James Meikle**
guardian.co.uk, Thursday 13 October 2011 11:39 BST
[Article history](#)



‘Typical of the circumstances was illustrated when on three occasions when I visited my wife, she was sitting in the corridor, half dressed sometimes, and nobody seemed concerned or aware’

Counting the Cost: Alzheimer’s Society, 2009

Outcomes are poor

Six month outcomes amongst patients over 70 with cognitive impairment admitted to a general hospital (n=195)

- Return to previous residence 73%
- Mortality 31%
- Readmission 42%
- Return to pre-illness function 20%

Possible explanations

- Hospitals are harmful
- Medical treatments and rehabilitation are not given
- Medical treatments do not work
- Progressive underlying disease

Medicine in dementia

Antibiotic sensitivities don't change because the patient has dementia

Some staff lack expertise

‘In all my years of training, I have never, ever, ever, been taught how to look after patients with dementia’ [hospital consultant physician]

Assessing a patient who appears to be muddled

Keep an open mind. When confused old people are referred to hospital, minds snap shut ...

People with dementia in hospital are complex

Presenting problems amongst 53 patients over 70 with cognitive impairment admitted to a general hospital

- Falls 42 (81%)
- Immobility 38 (73%)
- Pain 28 (54%)
- Incontinence 24 (46%)
- Breathlessness 12 (23%)
- Dehydration 11 (21%)
- Delirium 11 (21%).

A huge variety of acute medical diagnoses

Final diagnoses amongst 53 patients over 70 with cognitive impairment admitted to a general hospital

- fractured neck of femur 7 (1 peri-prosthetic)
- other fractures 6
- pneumonia 4
- multi-factorial fall 4
- multi-factorial functional problem 3 (immobility, pain, confusion, incontinence)
- fast AF 3 (2 syncope, 1 heart failure)
- dehydration/renal failure 3
- urinary tract infection 1 (+ 3 contributory)
- alcohol intoxication 2
- adverse drug reactions 2 (amantadine, sedatives)
- seizures 2 (alcohol excess, brain metastases)
- unresponsive episode/syncope 2
- painful hip post fall 2
- unexplained delirium 2
- cancer 2 (gastric, lung)
- infective exacerbation of COPD 1
- infected leg ulcer 1
- gastroenteritis 1 (+ dehydration + syncope)
- stroke 1
- ruptured Achilles tendon 1
- rheumatoid arthritis 1
- progression of vascular dementia 1 (+ immobility + poor oral intake)
- acute urinary retention 1 (with a fall)
- anxiety, old stroke 1

Harwood et al, 2012

People with dementia in hospital are very dependent

Prevalence amongst 195 patients over 70 with cognitive impairment admitted to a general hospital

- | | | | |
|-----------------------------------|-----|------------------|-----|
| • Barthel <5/20 | 31% | • MMSE <10/30 | 30% |
| • help to transfer
(hoist 13%) | 65% | • delusions | 14% |
| • help feeding
(unable 15%) | 58% | • hallucinations | 11% |
| • incontinent of urine | 67% | • agitated | 18% |
| • sleep problems | 34% | • depressed | 34% |
| | | • anxious | 35% |
| | | • apathetic | 38% |
| | | • disinhibited | 10% |

Dementia in crisis

- Super-added delirium
- Physical illness in person with dementia
- Progression of dementia especially vascular
- Behavioural problem, disability, coping, misjudgment

... physician role may be to *exclude* physical disease

Dementia in acute hospitals is different

- Physically ill and dependent
- 2/3 have added delirium
 - ... which is difficult to diagnose and manage
 - ... and slows things down
- Vascular dementia predominates

Why does delirium matter?

- Common
- Atypical presentation of illness in older people
- Unpleasant
- Serious consequences
- It's on the health policy agenda

Difficulties diagnosing delirium

- Overlap with normality (cat naps, insomnia) and dementia
- 6-10 x commoner in dementia
- Variability, fluctuation, broad range of features
- Poorly understood words (attention, disordered thinking)
- Unfamiliar features not recognised by doctors or nurses
- Cognition can be difficult to assess in an ill person

A useless differential diagnosis

TABLE 3. Putative causes of delirium

Medications:

Psychotropics (anxiolytics, sedative-hypnotics, barbiturates, antidepressants, antipsychotics, lithium)

Anticonvulsants

Analgesics

Anticholinergics (antihistamines, antispasmodics, antiparkinsonian agents)

Antiarrhythmics

Antihypertensives

Aminoglycoside antibiotics

Miscellaneous (cimetidine, steroids, nonsteroidal anti-inflammatory drugs, salicylates)

Drugs of abuse (phencyclidine and hallucinogenic agents)

Alcohol

Poisons (heavy metals, organic solvents, methyl alcohol, ethylene glycol, insecticides, carbon monoxide)

Withdrawal syndromes

Alcohol

Sedatives and hypnotics

Cardiovascular

Congestive heart failure

Cardiac arrhythmia

Myocardial infarction

Neurologic

Head trauma

Space-occupying lesions: tumor, subdural hematoma, abscess, aneurysm

Cerebrovascular diseases: thrombosis, embolism, arteritis, hemorrhage, hypertensive encephalopathy

Degenerative disorders: Alzheimer disease, multiple sclerosis

Epilepsy

Infection

Intracranial: encephalitis and meningitis (viral, bacterial, fungal, protozoal)

Systemic: Pneumonia, septicemia, subacute bacterial endocarditis, influenza, typhoid, typhus, infectious mononucleosis, infectious hepatitis, acute rheumatic fever, malaria, mumps, diphtheria, AIDS

Metabolic

Hypoxia

Hypoglycemia

Acid-base imbalance: acidosis, alkalosis

Electrolyte imbalance: elevated or decreased sodium, potassium, calcium, magnesium

Water imbalance: inappropriate antidiuretic hormone, water intoxication, dehydration

Failure of vital organs: liver, kidney, lung

Inborn errors of metabolism: porphyria, Wilson disease, carcinoid syndrome

Remote effects of carcinoma

Vitamin deficiency: thiamine (Wernicke encephalopathy), nicotinic acid, folate, cyanocobalamin

Endocrine

Thyroid: thyrotoxicosis, myxedema

Parathyroid: hypo- and hyperparathyroidism

Adrenal: Addison disease, Cushing syndrome

Pancreas: hyperinsulinism, diabetes

Pituitary hypofunction

Hematologic

Pernicious anemia

A useful differential diagnosis

- meds
- meds
- meds
- infections
- hypoxia
- metabolic
- some combination
- something else

Delirium management

- Find the cause and treat it
- Anti-psychotics, maybe
- Explain to relatives and engage patient
- Keep your nerve, don't make the wrong plans too soon
- Post episode debrief?

Delirium - slow recovery

Persistence

- 61% after 24h
- 45% at discharge
- 33% at 1 month
- 26% at 3 months
- 21% at 6 months

Cole 2009 systematic review

Diagnostic problems

- Information gathering
- Non-specific presentations
- Multiple pathologies
- Investigative burden

Management problems

- Complexity: physical, mental and social
- Complications and adverse events
- Effects of a hostile environment
- Understanding and compliance
- Nihilism
- Multiple stakeholders: relationship-centred care

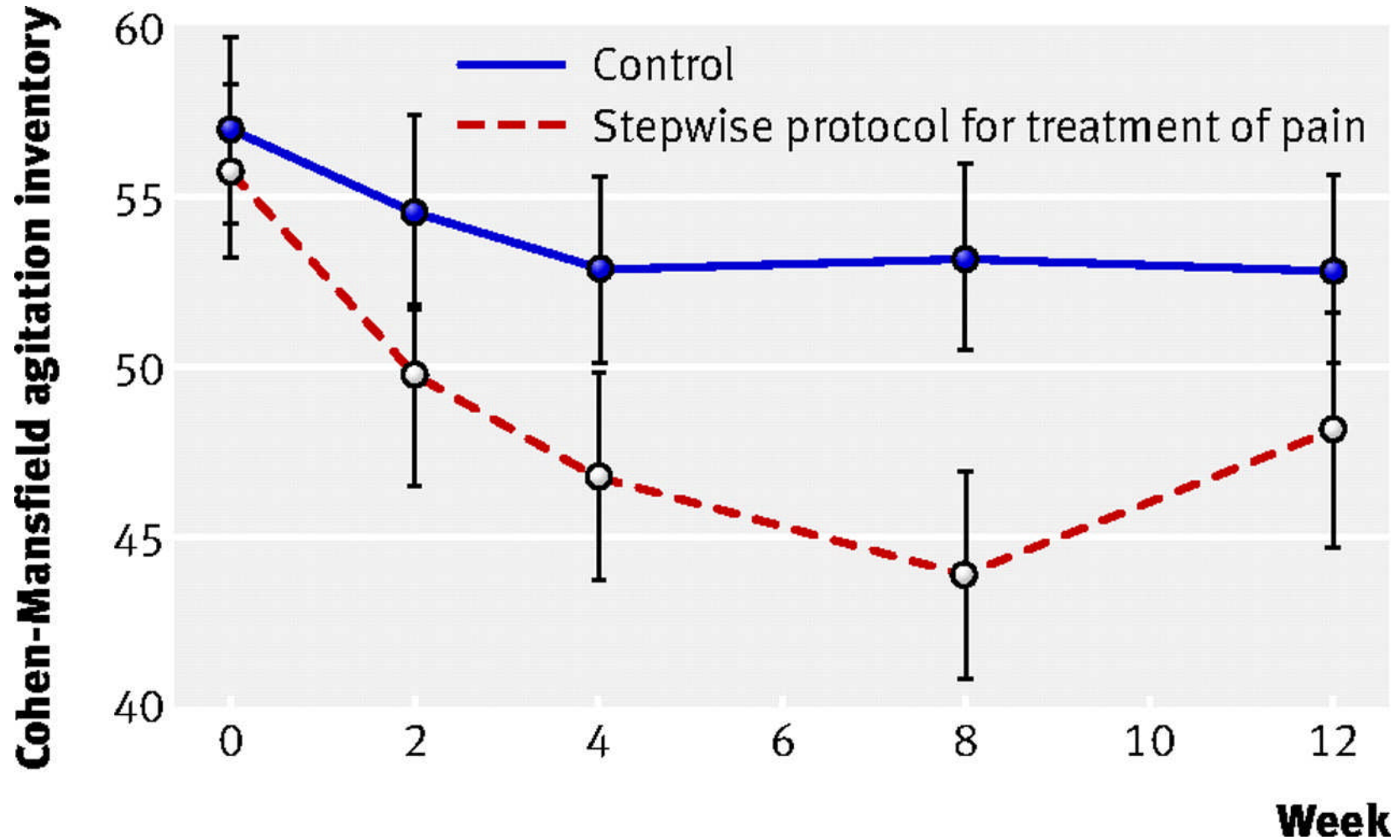
An illness career

- Primary care
- Community mental health teams
- Intermediate care
- Social care

Specifics

- Falls
- Continence
- End of life care
- Pain

Cohen-Mansfield agitation inventory scores, with 95% confidence intervals, over study period.



Husebo B S et al. BMJ 2011;343:bmj.d4065



How to put things right

- Leadership
- Attitudes and skills
- Resources

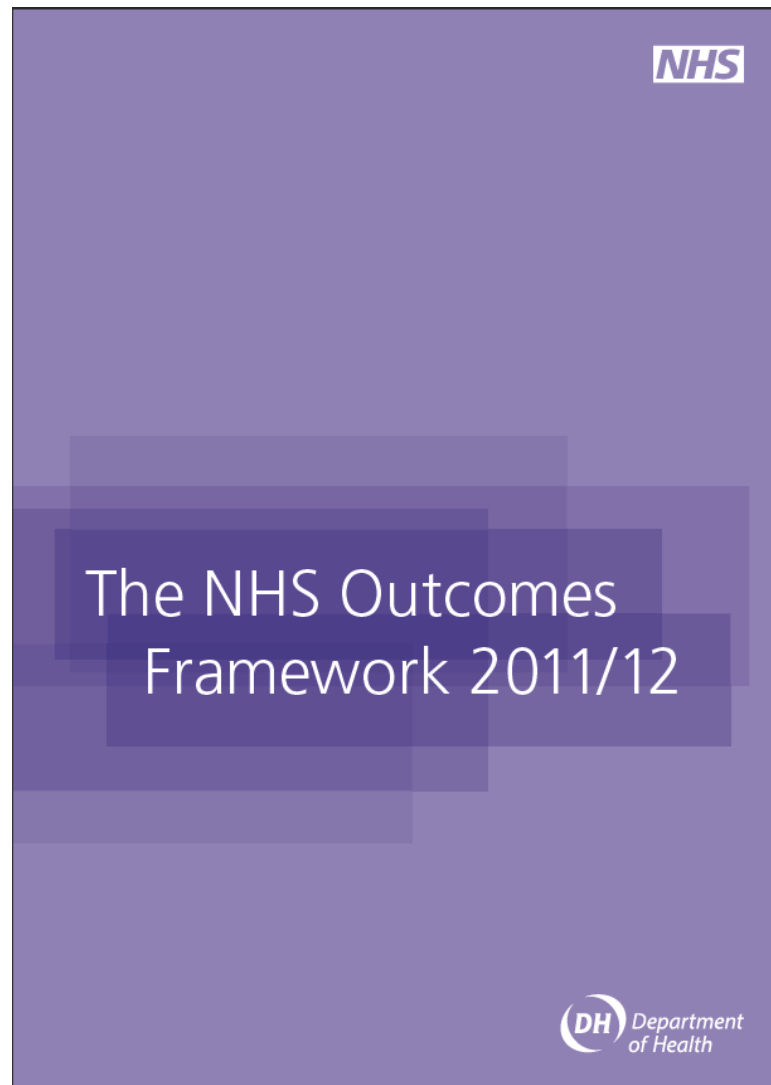
Right place, wrong person

A key message echoed by staff at all levels in the organisations involved in this study was that the acute hospital is not the 'right place' for older people.

This chapter examines how the prevalence of this view has resulted in the physical environment, staff skills and education and organisational processes acting as barriers to delivering dignified care to older people.

Practical steps

- MH professionals
- Environment, systems
- Communication, relationships, empathic understanding
- Purposeful activities, occupational profiling
- Partnership working with family carers



Domain 1: Preventing people from dying prematurely

Domain 2: Enhancing quality of life for people with long-term conditions

Domain 3: Helping people to recover from episodes of ill health or following injury

Domain 4: Ensuring that people have a positive experience of care

Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm

Summary

- Confused older people are core business for acute hospitals
- Most are admitted for good reason
- But they are complex and difficult to manage
- Our job is to do the medicine well
- Providing better quality of care is possible with good leadership, skills and resources