

‘No rehab potential’

Functional recovery after acute illness among people with dementia

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Mr M

- Dementia with Lewy bodies for 6 years
- Lives with wife, supported by son
- Wandering, up at night, poor safety awareness, falls
- Unwell in respite care

Mr M

- Hypotensive, dehydrated, septic (CRP 250), renal failure (Urea 50, Cr 320)
- Drowsy, immobile, distressed crying out

Mr M

- Little improvement in behaviour or function despite treatment
- Wife insistent she wants him home
- MDT don't think it can work
- Referred for community hospital rehabilitation

Mr M

- Assessed and declined
- 'No rehab potential'

Outline

- Disability amongst people with dementia in hospital
- Delirium
- Recovery models
- Can people with dementia rehabilitate?

Dementia: definition

DEMENTIA

A. Multiple cognitive deficits

1. Memory impairment

2. One or more of:

(a) aphasia

(b) apraxia

(c) agnosia

(d) disturbance in executive functioning

B. Impairment in social or occupational functioning, decline from a previous level of functioning.

C. Gradual onset, progressive decline, at least 6 months.

D. Not due to specified other conditions...

E. ... or delirium.

Dementia subtypes

Alzheimer's disease	31%
Vascular	22%
Mixed	25%
Lewy body	11%
Fronto-temporal	8%
Rarities	3%

The problem with dementia

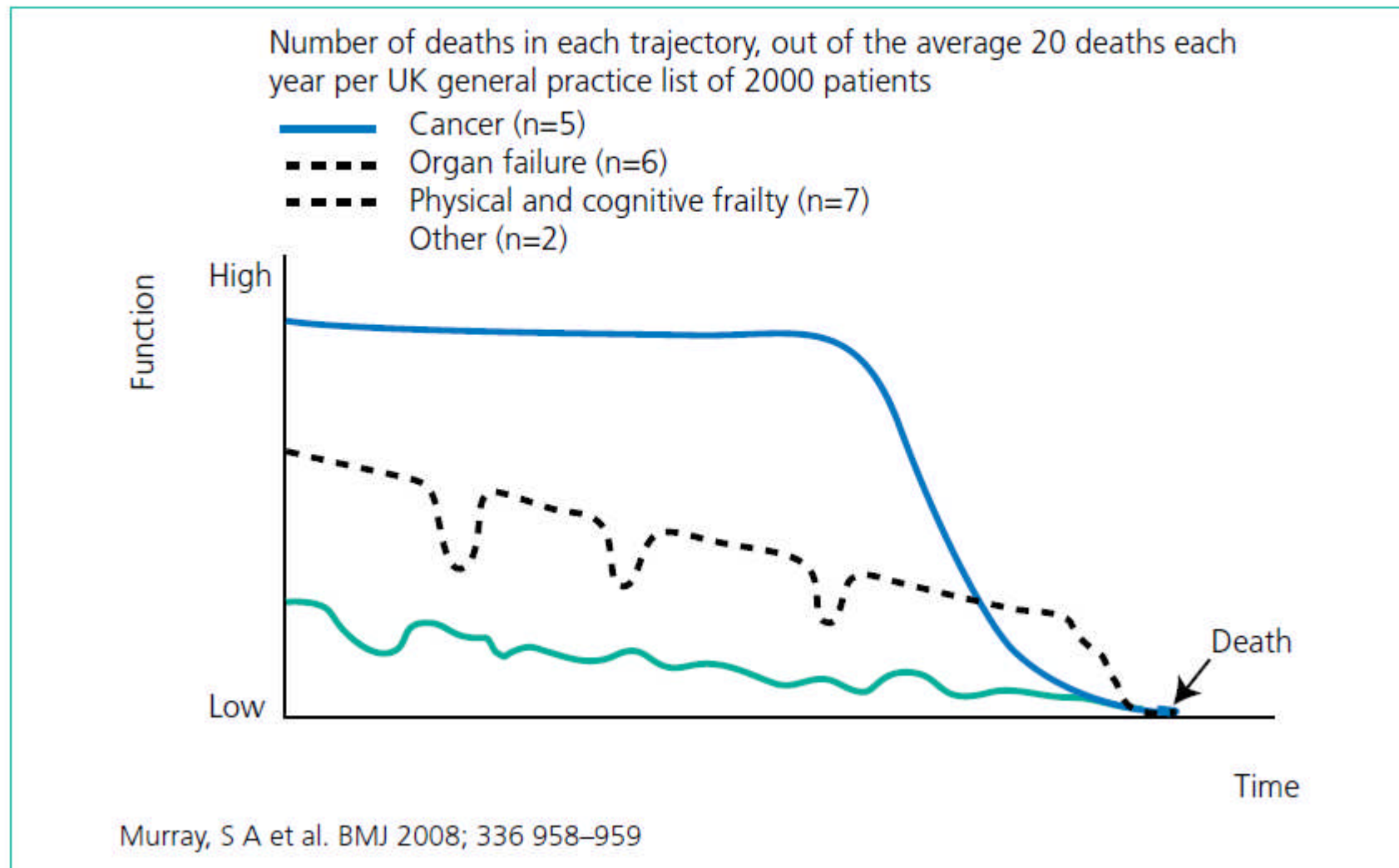
- Activities of daily living
- Communication, reasoning, decision making
- Safety awareness
- Behavioural and psychological symptoms
- Carer strain
- Progression to end of life care

Medical admissions over 70

- Delirium alone 9%
- Delirium complicating dementia 19%
- Dementia alone 23%

- Total delirium 28%
- Total dementia 41%
- Previously diagnosed dementia 28%

Figure 1: The three main trajectories of decline at the end of life



Functional presentations

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

Falls	64%
Immobility	73%
Pain	54%
Incontinence	46%
Breathlessness	23%
Dehydration	21%
Confusion	21%

Glover et al, 2013

Psychopathology

Prevalence of at least moderate severity symptoms amongst patients over 70 with cognitive impairment admitted to a general hospital

- delusions 14%
- hallucinations 11%
- agitated 18%
- depressed 34%
- anxious 35%
- apathetic 38%
- disinhibited 10%
- sleep problems 34%
- MMSE <9/30 25%

Goldberg et al, 2012

Severe and worsening disability

Barthel Index	Prior to acute illness	At admission
0-5 (very severe)	7%	31%
6-10 (severe)	17%	32%
11-15 (moderate)	20%	27%
16-20 (mild)	49%	10%
Incontinent	23%	53%
Major help transfer	13%	48%
Help feeding	23%	58%

Goldberg et al, 2012

Poor outcomes six months later

- 27% did not return home
- 31% dead within 6 months
- 18% 30-day readmission
- 42% 6-months readmission
- 25% new care home admission
- 16% spent >170/180 days at home

Recovery of function over six months

Change in Barthel Index	Admission to follow up	Pre-acute illness to follow up
Improved (≥ 2 points)	44%	10%
Same (± 1 point)	27%	32%
Deteriorated (≥ 2 points)	29%	58%

Bradshaw et al, 2013

Delirium

CORE

1. Inattention or arousal
2. Cognitive impairment
3. Abnormal sleep-wake cycle
4. Temporal course: abrupt change, fluctuates (hours)

ASSOCIATED

1. Psychosis in 50% (visual hallucinations, paranoid delusions)
2. Psychomotor (agitation, restlessness, retardation)
3. Altered or labile affect or emotion (fear, anger, depression)
4. Autonomic features

Diagnosis: underlying cause

- Any illness, injury, drug, drug withdrawal
- <50% have single cause
- 10-20% no discernible cause

Slow recovery

Persistence

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

Outcomes 6 months after delirium

	Delirium n=107	No delirium n=140
Median hospital stay	14d (IQR 7-32)	15d (IQR 6-39)
Mortality	37%	27%
Readmission	42%	42%
MMSE improved ≥ 3	43%	27%
ADL improved ≥ 3	25%	36%
Care home placement	32%	20%

Rehabilitation

The process of trying to help people who have suffered some impairment to maximise psychological well being, functional ability and social integration

Rehabilitation

- Re-enablement
- Re-settlement
- Re-adjustment

Maximising function, maximising choice

Why rehab might not work

- Memory loss, apraxia, understanding, agnosia, executive function loss
- Progression of disease
- Frailty
- Complications
- Upset, distress, fear, non-cooperation

Why rehab might not work

- Low expectations, nihilism
- Provoked and untreated distress
- Untreated symptoms
- Disengagement or conflict with families
- Performance targets
- Poor follow on services

Why rehab might work

- Recovery of acute illness
- Recovery of delirium
- Reversal of deconditioning
- Avoidance of complications
- Access implicit or procedural memory
- Use retained abilities
- Minimise threat and create productive relationships

How rehab might work

- Dementia awareness and expertise
- Slow down
- Follow the sprit of ethical and legal decision making
- Adaptation vs restoration
- Mental health specialist intermediate care
- Community mental health teams
- Rehab approach in care homes

Medical model

- Diagnose
- Treat
- Discharge

Comprehensive Geriatric Assessment

- Diagnosis
- Function
- Mental Health
- Social
- Environmental

Social model (disability movement)

Disability is an oppression by the majority in Society on those with different abilities

Oliver 1990

Principals of palliative care

- Meticulous management of symptoms or problems
- Open communication
- Psychological, emotional and spiritual support of the patient and those close to them

The experience of dementia

- Neurological impairment
- Personality
- Biography
- Mental and physical health
- Social environment and relationships

Malignant social psychology

<i>Psychological need</i>	<i>Detractors</i>	<i>Enhancers</i>
Attachment	<ul style="list-style-type: none"> • Accusations • Treachery • Invalidation 	<ul style="list-style-type: none"> • Acknowledgement • Genuineness • Validation
Inclusion	<ul style="list-style-type: none"> • Stigmatising • Ignoring • Banishment • Mockery 	<ul style="list-style-type: none"> • Encouraging participation • Belonging • Fun
Identity	<ul style="list-style-type: none"> • Infantilizing • Labelling • Disparagement 	<ul style="list-style-type: none"> • Respect • Acceptance • Recognition
Occupation	<ul style="list-style-type: none"> • Disempowerment • Disruption • Imposition • Objectification 	<ul style="list-style-type: none"> • Empowering • Enabling • Facilitating • Collaborating
Comfort	<ul style="list-style-type: none"> • Withholding attention • Exclusion either physical or psychological • Outpacing – rushing 	<ul style="list-style-type: none"> • Warmth • Providing security and safety • Relaxed pace

Person-centred care

- Value people with dementia and those who care for them
- Individualised care
- Perspective of person with dementia
- Social environment

Process differences, from casenotes

	MMHU (n=110)	Standard care (N=95)
Cognitive assessment (MMSE)**	52%	26%
Collateral cognitive history**	64%	33%
Collateral function**	81%	42%
OT**	83%	37%
SLT**	18%	2%
PT	88%	82%
Clear medical diagnosis*	92%	77%
Progress discussed with family*	86%	75%
Intermediate care used	13%	5%
CMHT referral*	20%	9%

*p<0.05, **p<0.001

NIHR TEAM Trial: outcomes at 90 days

	MMHU (n=309)	Standard care (N=290)	P (adjusted)
Median days at home	51d	45d	0.3
Not returned home	26%	30%	0.5
Died	22%	25%	0.9
Median initial LOS	11d	11d	0.2
Readmission	32%	35%	0.8
Total LOS in 90d	16d	16d	0.8
Move to care home	20%	28%	0.3

NIHR TEAM Trial: health status at 90d

	MMHU (n=241)	Standard care (N=219)	P (adjusted)
Median MMSE/30	16	16	0.6
Median total NPI/44	19	17	0.5
Median Barthel/20	12	13	0.8
Median London Handicap/100	33	42	0.9
Median DEMQOL	84	84	0.7
Median proxy DEMQOL	93	93	0.8

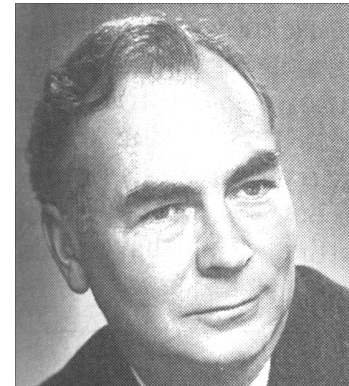
NPI: Neuropsychiatric Inventory, behavioural and psychological symptoms

MMSE: mini-mental state examination

DEMQOL: Dementia Quality of Life scale

Objectives of health care

- Prevention (of disease or complications)
- Cure (of disease or complications)
- Defer death
- Relieve symptoms
- Improve physical and social function
- Give information
- Support families and other carers



THE ROCK CARLING FELLOWSHIP

1976

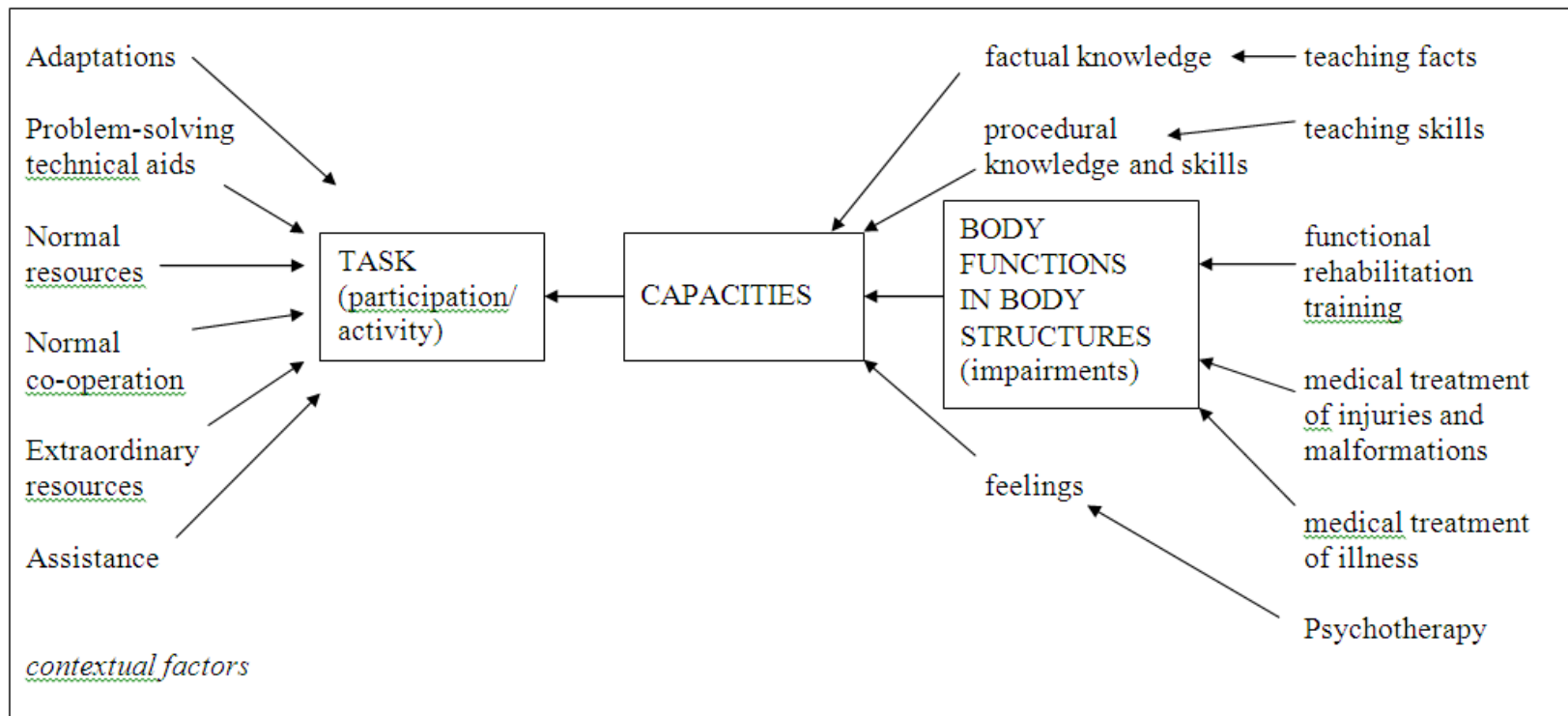
The role of medicine

DREAM, MIRAGE,
OR NEMESIS?

Harwood 1995, after McKeown 1976

ICF model

Figure 8.1: Schematic representation of the WHO's framework for rehabilitation – the *International Classification of Functioning, Disability and Health* (ICF). The aim is to maximise activity and participation. Arrows represent necessary conditions. Devised by Dr [Tormod Jaksholt](#)



Rehabilitation in dementia

- Eclectic
- Be realistic about goals
- Live with uncertainty, don't jump to conclusions
- Take time
- 'Functional approach'
- Work with families and other carers
- Work in teams, value specialists.
- Process is as important as product

Mr M: end of the story

- Long discussions with wife and son: impass
- Rehab efforts continues
- Behaviour settled
- Mobility improved, able to walk 30m with frame
- Went home with social care and CMHT follow up

Mr M: end of the story

Dear All

I've just taken a rather long and strange phone call from a Mrs M - her husband was on B47 for 6 weeks, she said you would remember him?!

I don't think she wanted to complain as much as she wanted to say the ward team (MDT) told her she wouldn't cope and he needed to go into a home. She wants you to know she is coping and he's sat in the garden enjoying the sunshine!!

It was a really strange conversation - I'm sure there is more to this than meets the eye!!!

Regards
John

Matron

Rehabilitation in dementia

More to this than meets the eye

Thank you