

Non Pharmacological Interventions for people with dementia



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Person centred Approach

- ▶ Goal to maintain their Personhood during the decline of cognitive or physical abilities.

Kitwood defines person hood (1997):

“A standing or status that is bestowed upon one human being by others in the context of relationships and social being. It implies recognition, respect and trust.”





Background

- Presentation focuses on recently reviewed material from Cochrane reviews (Wood et al 2018, meta analysis (Chiu, 2018) & several systematic reviews (Livingston 2017 & Meyer et al 2018).
- Consolidation of evidence should better inform health practitioners and caregivers on best practice interventions.

What we know

- It is clear from the review - quality of the psychosocial research is improving –
- Across aged residential care and community settings –
Interventions that have been in place for several decades
- More robust research
- Creating understanding of the effect is growing
- This is very encouraging and promising



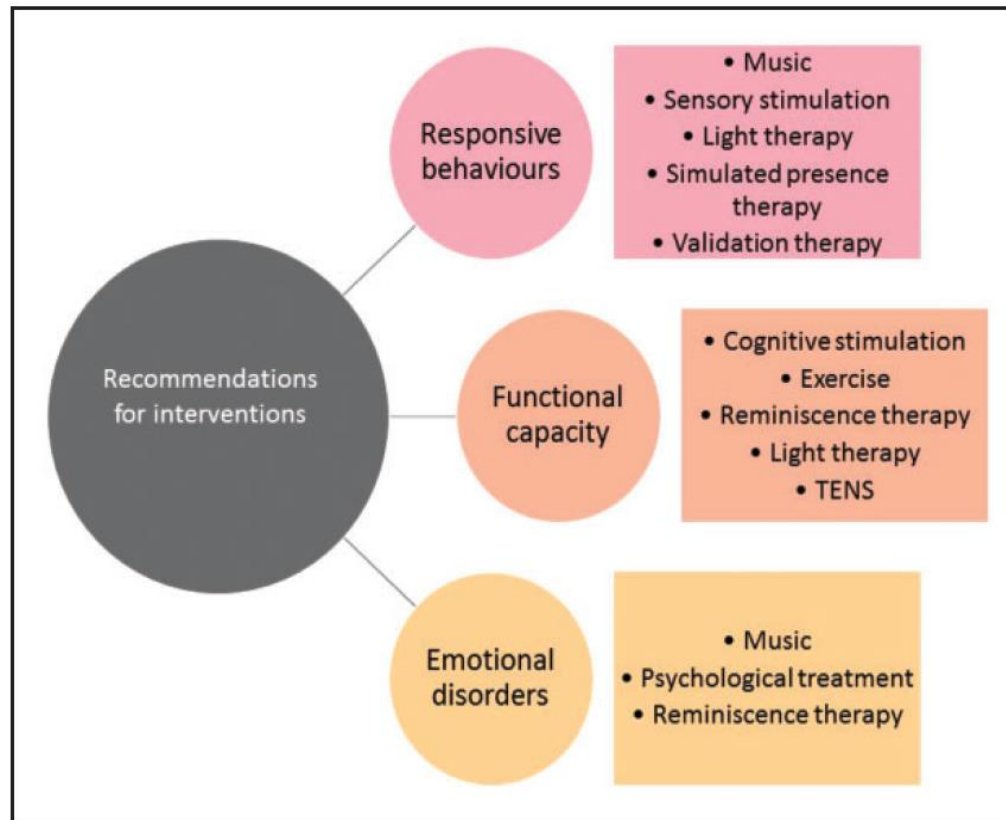


Figure 2. Summary of recommended interventions. TENS: transcutaneous electrical nerve stimulation.

Reminiscence Therapy RT

The effects of reminiscence interventions are inconsistent, often small in size and can differ considerably across settings and modalities. The wide range of RT interventions across studies makes comparisons and evaluation of relative benefits difficult (Wood et al 2018).

Overall RT has some positive effects on people with dementia in the domains of QoL, cognition, communication and mood.

- ▶ **Care home studies show the widest range of benefits, including QoL, cognition and communication (at follow-up).**
- ▶ **Individual RT** is associated with probable benefits for cognition and mood.
- ▶ **Group RT** and a community setting are associated with probable improvements in communication and interaction of the person immediately after treatment and possible weeks – months later.
- ▶ Treatment protocols are not described in sufficient detail in many publications.



Validation therapy

- Developed in the 1960s and 1970s to treat Alzheimer's disease by Naomi Feil.
- Validation Method is a holistic therapy that focuses on empathy and provides a means for people with the disease to communicate. The underlying principals is enhancing their dignity and bringing them peace.



Validation Therapy Example



The caregiver.

The mother is convinced someone is throwing away her most precious belongings, including photo albums and scrapbooks. But the mother is actually hiding these things.

- ▶ Instead of arguing with the mother, the caregiver rephrase the situation, helping his or her mother reminisce about her youth in a positive light: “Your wedding ring is gone. You think I’ve stolen it?,” “It was a beautiful ring,” “How did you and Dad meet?”

Reality orientation Therapy

- Reality Orientation therapy has an effect on cognition – not on behavioural or depressive symptoms
- Combining RO with other types of interventions such as reminiscence therapy and cognitive training significant improvement on cognition
- Community dwelling individuals benefit more greatly
- Dose response 600mins (10 hrs) (*Chiu et al 2018*)



Bright Light Therapy

- ▶ Suprachiasmatic nucleus (SCN) controls circadian rhythms
- ▶ Light-dark cycle controls the circadian rhythms – light can reset those rhythms when out of kilter.
- ▶ Bright Light between 5000 Lux to 10,000 Lux
- ▶ Daily exposure
- ▶ Effect cognitive deterioration slowed
- ▶ Depressive symptoms decreased (*Forbes et al, 2014*)
 - ▶ **Caution can increase agitation in some individuals**

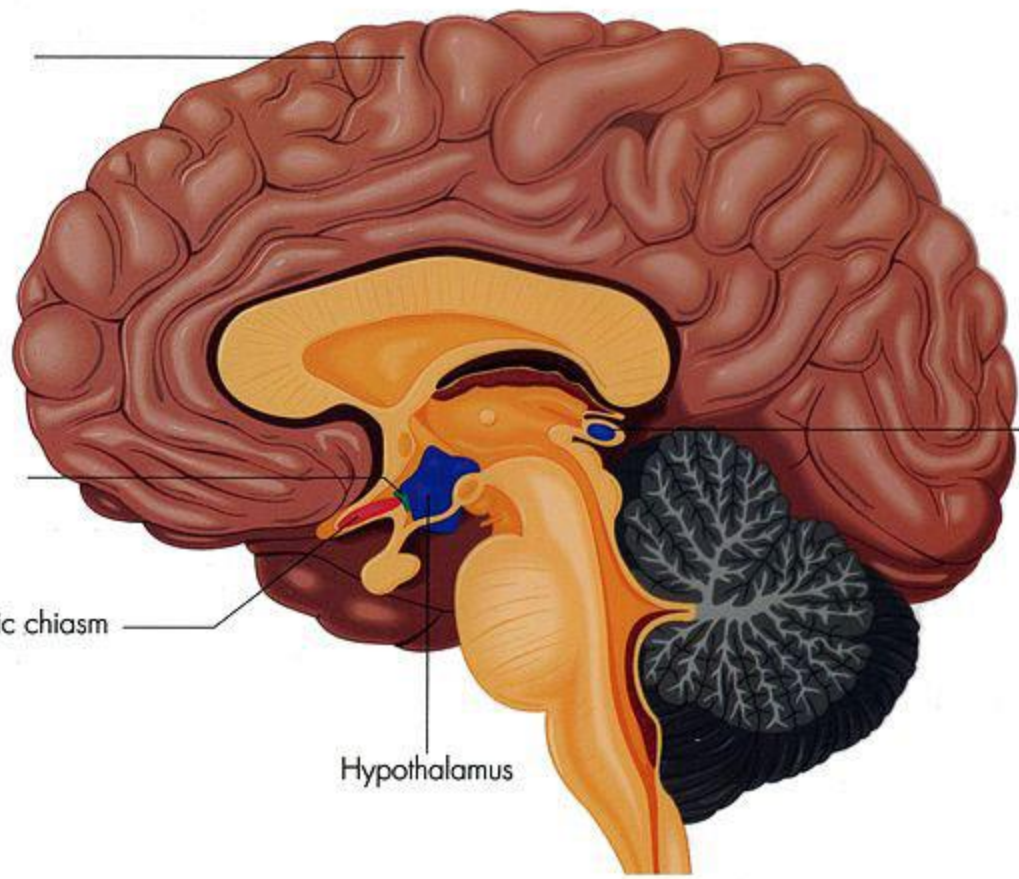
Cerebral cortex

Suprachiasmatic nucleus

Optic chiasm

Hypothalamus

Pineal gland



Non pharmacological approaches in Dementia

Physical exercise

1. Aerobic exercise
2. Strength exercise

Cognitive Intervention *(individual or group)*

1. Cognitive training (CT) – individual approach practice of standard tasks; a range of difficulty levels within the standard set of tasks to suit individual's level of ability
2. Cognitive stimulation (CS) – usually group stimulation - engagement of activities and discussions aimed at enhancing cognitive and social functioning
3. Cognitive rehabilitation (CR) – individual approach emphasis based on improving performance in everyday life rather than on cognitive tests



Physical

Definition: Planned, structured, repetitive movement to improve or maintain one or more components of physical fitness.

► Key points and Recommendations

Engaging in exercise is helpful, feasible and well tolerated – the effect is still not clear on cognition.

The most persuasive evidence is for high intensity interventions to help cognition in mild Alzheimer's disease patients (*Meyer 2018*).

Physical Activity

- improved mood.
- better sleep.
- reduced likelihood of constipation.
- maintenance of motor skills.
- reduced risk of falls because of improved strength and balance.
- reduced rate of disease-associated mental decline.
- improved memory.



How physical activity inter-connects to self efficacy

(olsen et al 2015)





Types of exercise

- Some evidence that exercise programs can improve the ability of people with dementia to perform daily activities (ADL's)
- The studies showed no evidence of benefit on cognition, psychological symptoms, and depression.
- No evidence that exercise was harmful for the participants.
- Overall quality of evidence behind most of the results to be very low. (*Forbes et al 2015*)

Cognitive Stimulation

Definition:

- ▶ Interventions which offer a range of enjoyable activities providing general stimulation for thinking, concentration and memory usually in a group setting.



Cognitive

- ▶ Key points and recommendation

“Group cognitive stimulation therapy improves cognition in patients with mild to moderate dementia.....et al”

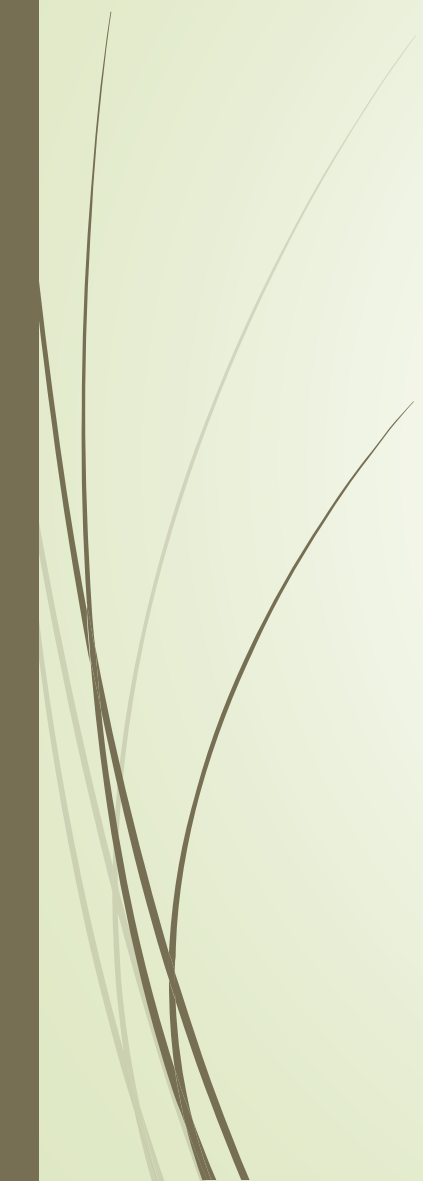
“Individual cognitive rehabilitation can be effective for patients with mild to moderate dementia with specific functional goals but its cost effectiveness requires more evidence”.

Livingston et al; 2017; The Lancet





Cognitive Stimulation Therapy (CST)

- ▶ A structured group treatment for people with mild to moderate dementia
 - ▶ Theoretical concepts of reality orientation, validation, reminiscence, and cognitive stimulation
 - ▶ World Alzheimer Report 2011,
Cochrane Review 2012, NICE Guidelines
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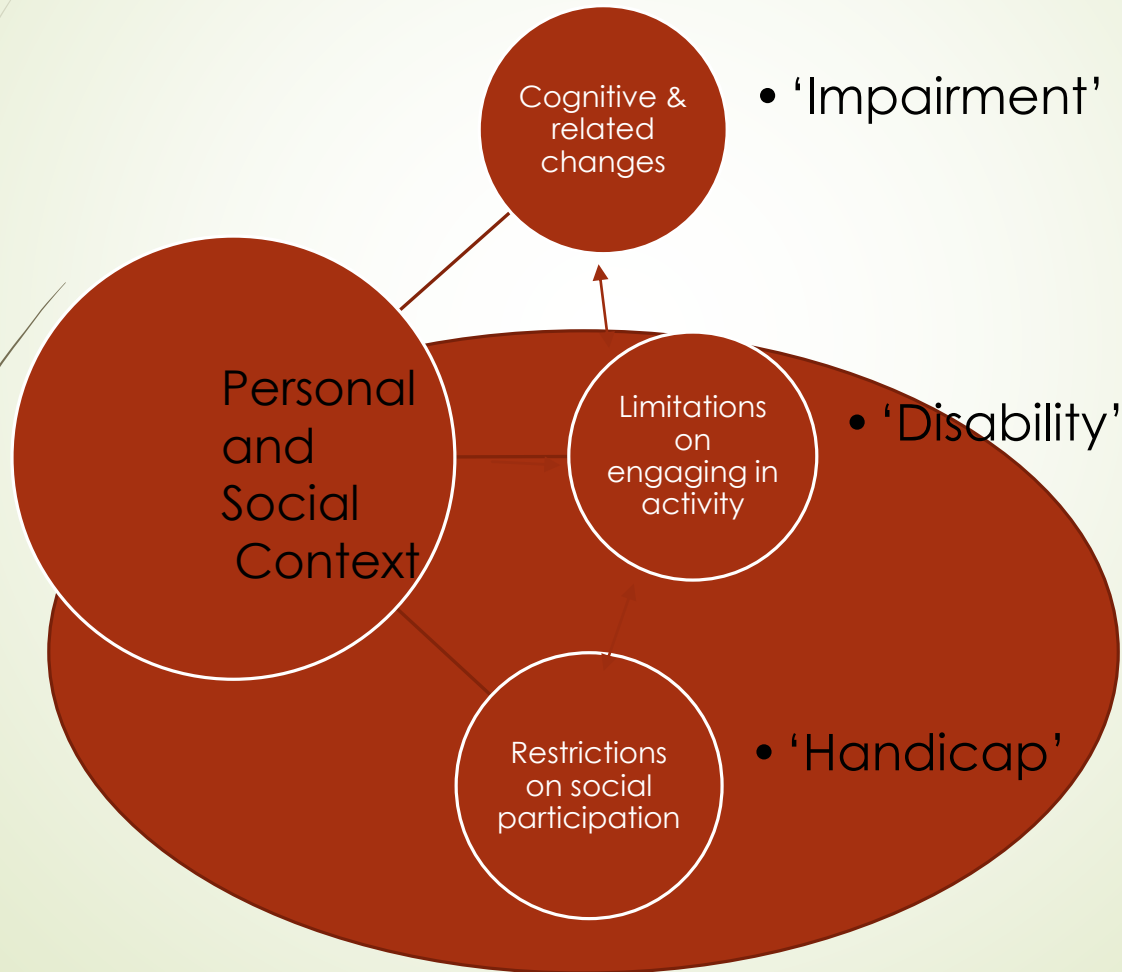
CST Program

- Maximum number per group 7-8
- Sessions twice a week for 7 weeks
- Maintenance – (optional) – sessions once a week for 24 weeks
- Both community and residential care settings
- Delivered by health professionals



	Cognitive Training	Cognitive Rehabilitation
Target	Impairment	Participation restriction
Context	Structured tasks and environments	Real world setting
Focus of intervention	Isolated cognitive abilities	Groups of cognitive abilities and processes required to perform everyday tasks
Format	Individualized or group	Individualized
Proposed mechanism of action	Mainly restorative, sometimes combined with psychoeducational and strategy training	A combination of restorative and compensatory approaches with psychoeducation and strategy training
Goals	Improved or maintained ability in specific cognitive	Performance and functioning in relation to collaboratively set

Cognitive rehabilitation in early stage dementia





What is Cognitive Reablement and Who is it For?

Cogngigigimn

What is Reablement?

- Procedurally, this includes:
 - An in-home context
 - Development of individualised goals with an interdisciplinary team
 - Short and intensive service
 - Overall goal is increasing functionality- retaining, regaining, gaining
 - Emphasis on independence
 - Reduction of formal care and institutionalisation



How CD overlaps with Reablement



The effect CD has on function and need for healthcare suggests that if we can preserve function, there will be benefits for health outcomes



The underlying goal of reablement is to address and improve functioning



This is especially relevant to individuals with early cognitive decline, as these patients can still improve function and participate in interventions effectively



Cog –Reablement Study

- Pilot Partnering with Enliven Home based support provider
- Select 12 participants with a CPS (inter-rai) 1-2

Intervention

- OT identify goal – MTD Meeting – support workers assist with activity
- Pre and post assessments
- Prep for HRC feasibility study

Music Therapy

- Definition: a intervention that will improve the quality of life and improve physical, social, emotional, spiritual health and well being (*van der Steen et al 2017*)
- Music related therapy was significant for both depression and anxiety
- Not response to reduce responsive behaviour



Concluding Comments

- Communication the essential component of all interventions
- Require well trained staff to deliver intervention
- Make sure that the intervention is appropriate for the person with dementia.





References



- ▶ Meyer C & O'Keefe F 2018 Non Pharmacological interventions for people with dementia" A review of reviews. Dementia
- ▶ Chiu H.Y., Chen P, Chen, Y et al 2018 Reality orientation therapy benefits cognition in older people with dementia. A Meta-analysis. International Journal of Nursing Studies. 86 pg 20 28
- ▶ Livingston, G et al 2017 Dementia prevention, intervention and care. The Lancet Commission.
- ▶ Woods, B, O.Philbin L, Farrell E, Spector A, Orrell M. 2018 Reminiscence Therapy for Dementia Review. Cochrane Library.