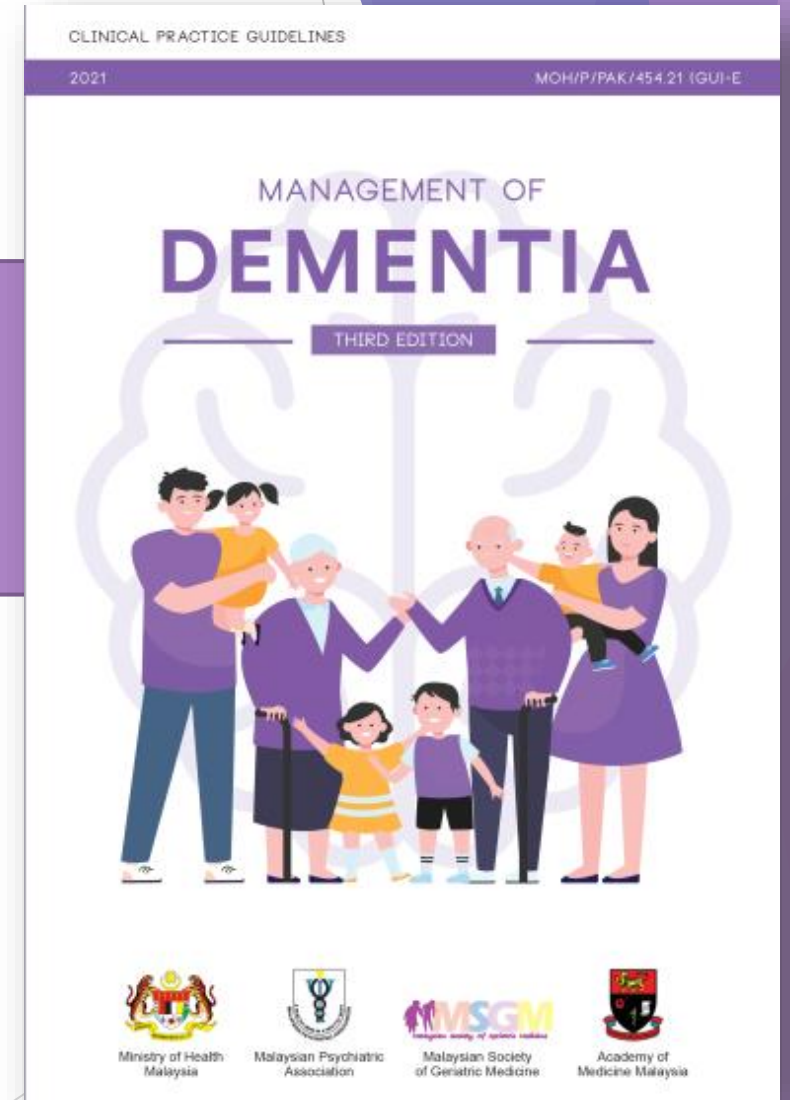


Training of Core Trainers CPG Management of Dementia (Third Edition)

NON-PHARMACOLOGICAL INTERVENTION IN DEMENTIA

By:
Dr. Suhaila Mohamad Zahir
Pakar Psikiatri Geriatrik
Hospital Tuanku Jaafar



Learning Objectives

1. To understand the positive effect of interventions on cognition and quality of life.
2. To learn about the various effective management of challenging behaviours and psychological symptoms in the context of dementia



Introduction

- ▶ Non-pharmacological interventions attempt to promote positive effects on cognition, quality of life, mood and, other behavioural and psychological symptoms of dementia. They have shown to have potential benefits in the management of dementia.



Goals of Therapy

- ▶ Positive effect on cognition and quality of life
- ▶ Management of challenging behaviours
- ▶ Management of psychological symptoms in the context of dementia



Positive effect on cognition and quality of life

OBJECTIVE: To maintain the PWD independence for as long as possible by taking part actively in their own day to day activity.

Activities that promote positive effect on cognition (cognitive maintenance) and quality of life:

- physical activity
- cognitive stimulation therapy
- reminiscence therapy
- spirituality and religious activity



Physical Activity

- ▶ A meta-analysis showed that physical activity interventions improved cognitive function.⁵⁹
 - Positive results were seen in combined exercise interventions (SMD=0.59, 95% CI 0.32 to 0.86) and;
 - Aerobic-only exercise interventions (SMD=0.41, 95% CI 0.05 to 0.76) only.
 - Both high and low frequency interventions were also effective.

59. Groot C, Hooghiemstra AM, Raijmakers PG, et al. The effect of physical activity on cognitive function in patients with dementia: A meta-analysis of randomized control trials. Ageing research reviews. 2016;25:13-23.



Cognitive Stimulation Therapy

- ▶ Cognitive stimulation - entails exposure to and engagement with activities and materials involving some degree of cognitive processing.
- ▶ Cognitive stimulation therapy (CST) given either through specific manual or general activities improved cognitive function (SMD=0.41, 95% CI 0.25 to 0.57).⁶⁰
- ▶ NICE recommends group cognitive stimulation therapy to people with mild to moderate dementia.⁴²

60. Woods B, Aguirre E, Spector AE, et al. Cognitive stimulation to improve cognitive functioning in people with dementia. The Cochrane database of systematic reviews. 2012(2):CD005562.

42. National Institute for Health and Care Excellence (NICE). Dementia: assessment, management and support for people living with dementia and their carers. London: NICE; 2018.



Cognitive Training

- ▶ Cognitive training - a specific training exercise geared to specific cognitive functions and, includes practice and repetition which may be computer-assisted.
- ▶ Low to moderate quality evidence → demonstrated that cognitive training was not associated with improvement in global measure of cognition (SMD=0.10, 95% CI -0.21 to 0.40)⁶¹

61. Bahar-Fuchs A, Clare L, Woods B. Cognitive training and cognitive rehabilitation for mild to moderate Alzheimer's disease and vascular dementia. The Cochrane database of systematic reviews. 2013;2013(6):CD003260.



Cognitive Rehabilitation

- ▶ Cognitive rehabilitation - include working on personal goals, often using external cognitive aids and with some use of learning strategies.
- ▶ NICE recommends cognitive rehabilitation or occupational therapy to support functional ability in the same group of PWD.⁴²



Reminiscence Therapy

- ▶ Cochrane systematic review → Showed no improvement in self-rated quality of life (QoL) compared with no treatment in PWD (SMD=0.11, 95% CI -0.12 to 0.33).⁶²
- ▶ The quality of evidence was moderate based on GRADE.
- ▶ NICE recommends → for group RT to promote cognition, independence and well-being of PWD.⁴²

62. Woods B, O'Philbin L, Farrell EM, et al. Reminiscence therapy for dementia. The Cochrane database of systematic reviews. 2018;3(3):CD001120.



Spirituality and Religious Activities

- ▶ In a systematic review → Spirituality and religious activities delayed cognitive decline and improve QoL of PWD.⁶³

63. Agli O, Bailly N, Ferrand C. Spirituality and religion in older adults with dementia: a systematic review. International psychogeriatrics. 2015;27(5):715-25.



Recommendation

Recommendation 5

- To improve cognitive function in mild to moderate dementia, cognitive stimulation therapy and physical activity can be offered



Behavioural and Psychological Symptoms of Dementia (BPSD)

- ▶ When encounter with BPSD:
 - Explore and address possible reasons for the PWD distress: e.g. physical problem, or inappropriate care.
 - Examine medication list
 - Look for contributing environmental factors
 - Consider psychiatric diagnosis
 - Focus on target behaviour to be addressed
 - Reserve medication for situations where the safety or well being of the patient or others is at risk.



Behavioural and Psychological Symptoms of Dementia (BPSD)-2

Psychosocial intervention for anxiety and depression.

- ▶ Cochrane systematic review: cognitive behavioral therapy (CBT) and, multifaceted and semi-tailored interventions (e.g. counselling sessions, education and outreach support to patients and carers) reduced depressive symptoms and anxiety (SMD= -0.22, 95% CI -0.41 to -0.03)⁶⁴

Personalized activities

- ▶ in PWD with agitation or aggression may promote engagement, pleasure and interest.⁴²

64. Orgeta V, Qazi A, Spector A, et al. Psychological treatments for depression and anxiety in dementia and mild cognitive impairment: systematic review and meta-analysis. The British journal of psychiatry : the journal of mental science. 2015;207(4):293-8.



Behavioural and Psychological Symptoms of Dementia (BPSD)-3

Music-based therapy⁶⁷

- ▶ Reduced depressive symptoms (SMD= -0.27, 95% CI -0.45 to -0.09)
- ▶ Reduced overall behaviour problems (SMD= -0.23, 95% CI -0.46 to -0.01)

Aromatherapy⁶⁸

- ▶ Equivocal findings on agitation and behavioural symptom

Massage and touch⁶⁹

- ▶ Improved behavioural problems (SMD= -0.39, 95% CI -0.53 to -0.25) and negative emotions (SMD= -0.60, 95% CI -1.14 to -0.06)

67. van der Steen JT, Smaling HJ, van der Wouden JC, et al. Music-based therapeutic interventions for people with dementia. The Cochrane database of systematic reviews. 2018;7(7):CD003477.

68. Forrester LT, Maayan N, Orrell M, et al. Aromatherapy for dementia. The Cochrane database of systematic reviews. 2014(2):CD003150.

69. Wu J, Wang Y, Wang Z. The effectiveness of massage and touch on behavioural and psychological symptoms of dementia: A quantitative systematic review and meta-analysis. Journal of advanced nursing. 2017;73(10):2283-95.



Behavioural and Psychological Symptoms of Dementia (BPSD)-4

Validation therapy⁷⁰

- ▶ Insufficient evidence on behaviour and emotional state

Light therapy⁷¹

- ▶ No effect on sleep, challenging behaviour or psychiatric symptoms

Simulated presence therapy⁷²

- ▶ Inconclusive efficacy on behavioural and psychological symptoms, and QoL

Snoezelen⁷³

- ▶ No effect on mood, behavior, communication and cognition

70. Neal M, Barton Wright P. Validation therapy for dementia. The Cochrane database of systematic reviews. 2003(3):CD001394.

71. Forbes D, Blake CM, Thiessen EJ, et al. Light therapy for improving cognition, activities of daily living, sleep, challenging behaviour, and psychiatric disturbances in dementia. The Cochrane database of systematic reviews. 2014(2):CD003946.

72. Abraha I, Rimland JM, Lozano-Montoya I, et al. Simulated presence therapy for dementia. The Cochrane database of systematic reviews. 2017;4(4):CD011882.

73. Vilela VC, Pacheco RL, Latorraca COC, et al. What do Cochrane systematic reviews say about non-pharmacological interventions for treating cognitive decline and dementia? Sao Paulo medical journal = Revista paulista de medicina. 2017;135(3):309-20.



Recommendation

Recommendation 6

- In people with dementia having behavioural and psychological symptoms:
 - explore and address possible clinical or environmental causes/triggering factors
 - offer psychosocial and environmental interventions as initial and ongoing treatment:
 - psychological intervention for depressive symptoms and/or anxiety
 - personalised and tailored activities for agitation and aggression

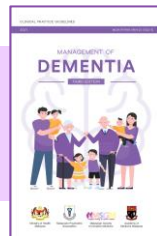


Take Home Messages

- Nonpharmacological interventions should be the mainstay of the treatment for cognition and behavioral and psychological symptoms (BPSD) in the context of Dementia, throughout all stages.
- Psychosocial interventions need to be tailored to individual needs.



Thank You



**Training of Core Trainers on
CPG Management of Dementia
(Third Edition)**