NON PHARMACOLOGICAL MANAGEMENT OF DEMENTIA

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DEMENTIA

is umbrella term used to describe a set of symptoms that can include changes in:

MEMORY

THINKING

PERCEPTION

REASONING

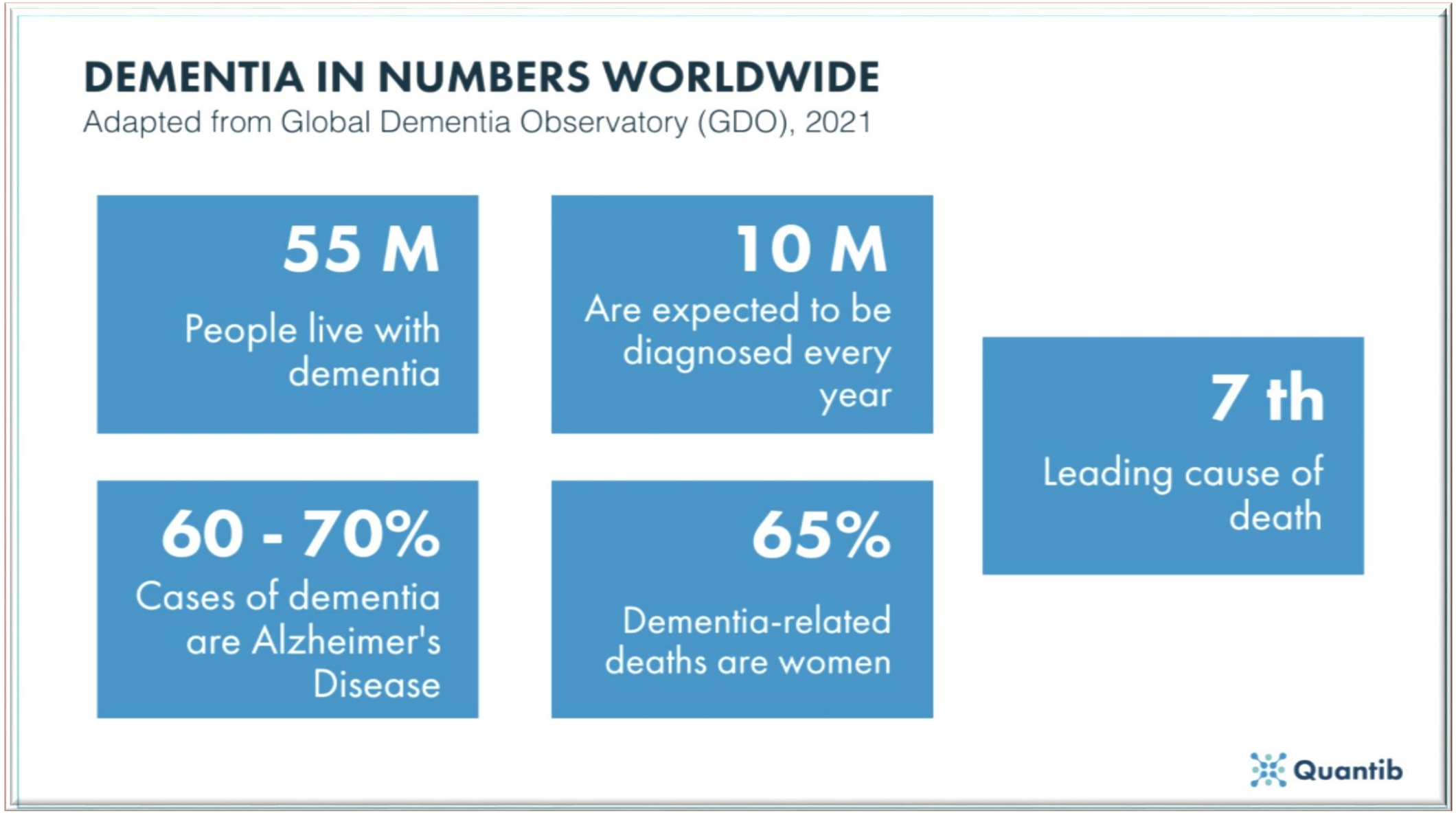
JUDGEMENT

ATTENTION/
CONCENTRATION

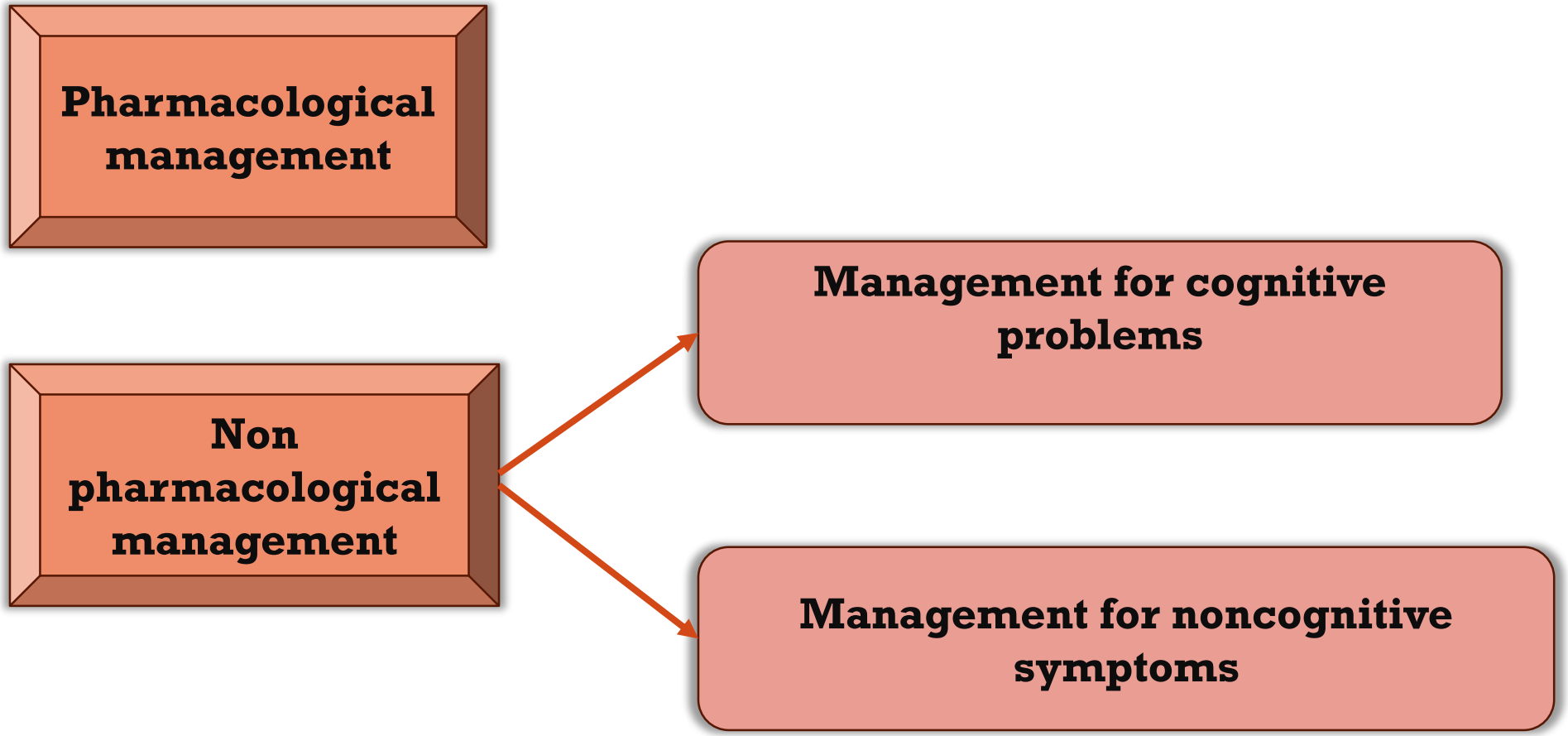
LANGUAGE

and must be severe enough to interfere with a persons ability to function.

BURDEN OF DEMENTIA



MANAGEMENT OF DEMENTIA



NON-PHARMACOLOGICAL MANAGEMENT

A broad spectrum of approaches that involve to work with

- Patient and their caregivers
- Physical and social environments

Different types of non-pharmacological interventions

- Psychological
- Psychosocial
- Interpersonal
- Behavioral
- Emotional
- Exercise and
- Environmental interventions.

Goals of non-pharmacological treatments

Although NPTs are not to cure dementia but to help create effective changes that aid the management of the syndrome progression by the following:

- Improve the person's ***cognition*** in areas such as memory, concentration, language skills, reasoning
- Improve the person's ***ability*** to function in real life, helping to maintain the person's independence
- Reduce the ***distress, mood disturbances, depression***
- Enhance the person's ***quality of life*** with quality care and adequate psychosocial support
- Through ***positive changes in the caregiver***: these can include reduced depression, distress, reduced burden, increased coping skills --- improved understanding and support from family and friends & enhanced quality of life.

MANAGEMENT FOR COGNITIVE SYMPTOMS

HELPING TO MANAGE EMOTIONS

- Some people may not trouble by memory loss, while others may find it frustrating and upsetting
- May lose self-confidence and be embarrassed by their difficulties, withdraw from social situations or stop doing things they usually do
- Memory loss lead to people misplacing items that they then might think other have moved or stolen
- If person is worried about the future, try to understand their concerns and help them focus on the present. Think what they can still do and encourage or support them to continue doing these things
- Encourage to continue spending time with other people and take part in meaningful activities that do not rely as much on memory such as word or number games

FORGETTING RECENT CONVERSATIONS OR EVENTS

- Encourage to use a diary, journal or calendar to record events and conversations
- If repeats a question, it won't help to tell them that they have heard information before. Give simple answers and repeat them as needed
- If can't remember whether they have done something or not, try to give context to your question and include prompts. "it must be a while since you ate breakfast, are you hungry? Rather than, "Have you had breakfast?"
- If does not remember a conversation you had with them recently, keep in mind that this is not because they weren't listening

FORGETTING NAMES AND WORDS

- Difficulties in finding right word or may confuse one word for another or forget meaning of certain words
- If struggling to find a word, don't rush them, give them enough time to say what they are trying to say
- If doesn't understand a word you are using, try using prompts, cues and context to help with naming items

- If struggling to remember someone's name, don't put them on the spot. Try to find tactful ways to remind them without highlighting that they have forgotten the person's name
- Consider using memory book or memory box with photos and brief information on people (such as their name and story of how the person knows them)

LOSING ITEMS

- Person may displace common items; glasses or keys, or put an item somewhere for safekeeping and then forget where it is. May also leave items in unusual places
- If thinks an item should be somewhere and it's not, this may lead them to think that someone is hiding or stealing
- Try to keep items in places where the person is used to them being- Eg. Hanging keys on a specific hook or always keeping them in same drawer
- Getting copies of items that are important or often misplaced

- Getting a tray marked “letters” or “post” to make sure that these do not get misplaced
- When looking for a lost item, use your knowledge of person to help you think where they might put things
- If item is put in unusual places but does not pose a risk to anyone in household, it may be best to leave things as they are

HAVING DIFFICULTIES WITH DAY TO DAY TASKS

- As dementia progresses, more difficulties with daily tasks; getting dressed, making a cup of tea or taking medication
- Most caregivers concerned about their safety and feel like stopping the person to from doing certain tasks for them
- However it is important to support the person to do as much as possible for themselves for as long as they can
- Help the person to perform tasks by breaking them down into smaller, simple steps
- Consider the time of day when person is usually more able to to concentrate and schedule tasks for these times

- Try to keep the person's usual routine
- Reduce distractions; background noise
- Make sure items that the person uses regularly are clearly visible to them, putting out items which the person will need to complete that task
- Use reminders, Eg. A sign by the front of door to remind the person to take their key and wallet if they leave the house
- Think about using assistive technology Eg. Electronic pill boxes to remind the person to take daily medication

GETTING LOST OUTSIDE HOME

- Person may want to leave the house for any number of reasons; this can help person maintain some independence and boost their wellbeing
- However person may set off somewhere and then forget where they were going or why and can lead to them getting lost or coming to harm
- Consider going out with them or arranging for someone else
- Neighbors and local shop keepers may be able to help if person gets lost
- Using mobile phone or other assistive technology products; GPS device may help
- Make sure person has some form of identification when they go out, as well as contact numbers of people they know well. "MedicAlert" may be helpful

GETTING LOST IN A HOME SETTING

- People may forget layout of home they are in and become confused about where each room is located sometimes does not recognize the house they are in at all
- As dementia progresses, they may say they want to to go home even when they are in home setting. May be recalling a former home, where they live as a child
- If recalling a home they are used to live in, speak with them about this other home, and what it means for them
- Don't try to convince the person, instead reassure them that they are safe, and encourage them to talk about the way they are feeling

- Make sure person is surrounded with familiar items that will help them feel at home; ornaments, photographs
- Keep a reminder of current home address by the front door, in living area and person's room
- If forgets layout of home, try putting up signs on internal doors to help them find bathroom, kitchen and other rooms they may use regularly
- Keep internal doors open so that person can see easily into each room and consider leaving the bathroom light on during night

FORGETTING UPCOMING EVENTS

- May forget upcoming events; medical appointments, visits and anniversaries
- Use calendars and clocks to remind them of upcoming events. Place them where the person can see well
- If person has online calendar on mobile phone, tablet or computer, consider entering reminders for upcoming events and appointments
- If given an appointment card, put it where the person can easily see. if the person uses a mobile phone, ask whether a reminder text could be sent to them before their appointment

STRUGGLING TO RECOGNISE FACES

- As dementia progresses, may begin to have difficulty recognizing familiar faces, including own reflection; feel as there are intruders in their home
- Also experience "time shifting"; believes that they are living at an earlier time in their life and that they are younger than they are now. May think their child is their partner or that their brother or sister is their parent
- May not recognize their children because they don't believe that they are not old enough to have adult children
- Try tactful way to give cues or reminder without mentioning their memory loss

- Use aids like a memory book with pictures of family and friends or keep photos and albums nearby
- Reassure and try to make them feel safe and comfortable
- Try not to show the person that you are offended or upset if they do not recognize you
- Someone may still recognize people voices or the way they smell, hearing a person's speak or smelling someone's perfume help them to recognize that person

FORGETTING BELIEFS AND ASPECTS OF IDENTITY

- In advanced stage, may forget or misremember certain beliefs or aspect of their identity; religious beliefs and practices, aspect of sexual orientation and gender identity and dietary choices
- If a person forget that they used to follow a particular diet, may now want to eat certain food that they did not used to eat. Could affect digestion.
- Speak to dietician or GP before eating these food
- If forget aspects of their faith, think of other aspects of worship that they may still enjoy or respond to; religious music or songs or holding or wearing symbols of their faith

MANAGEMENT FOR NONCOGNITIVE SYMPTOMS

Cognitive problems have been the traditional focus of interest in research and Mx for people with dementia.

However, present research findings have revealed a number of commonly seen ***non-cognitive symptoms*** (agitation, aggression, mood disorders , psychosis, sexual disinhibition, eating problems and abnormal vocalizations)

The International Psychogeriatric Association grouped these symptoms together under an umbrella term ***" behavioral and psychological symptoms of dementia (BPSD) "***

BPSD involves pharmacological and nonpharmacological interventions (NPT) , though a sound clinical background must identify the root cause of BPSD.

The concerning swith from pharmacological to non-pharmacological management was born out of documented research, which oulined the substantial adverse effects.

Therapeutics and Clinical Risk Management

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REVIEW

Adverse Drug Reactions of Acetylcholinesterase Inhibitors in Older People Living with Dementia: A Comprehensive Literature Review

Changes in Pharmacokinetics & pharmcaodynamics in aging population

Adverse drug Reactions (ADRs) in aging population

Aging population – multiple other chronic diseases

Polypharmcay

increased drug to drug interaction

Reports of ACEI– induced ADRs = 70% severe
Up to 2.3% being fatal ADRs

Abdominal pain	OR 1.95	95%CI 1.46 to 2.61	p<0.00001	7 studies
Abnormal dreams	OR 5.38	95%CI 1.34 to 21.55	p=0.02	1 study
Anorexia	OR 3.75	95%CI 2.89 to 4.87	p<0.00001	10 studies
Asthenia	OR 2.47	95%CI 1.27 to 4.81	p=0.008	3 studies
Diarrhea	OR 1.91	95%CI 1.59 to 2.30	p=<0.00001	13 studies
Dizziness	OR 1.99	95%CI 1.64 to 2.42	p<0.00001	12 studies
Fatigue	OR 4.39	95%CI 1.21 to 15.85	p=0.02	1 study
Headache	OR 1.56	95%CI 1.27 to 1.91	p<0.0001	9 studies
Insomnia	OR 1.49	95%CI 1.12 to 2.00	p=0.007	7 studies
Muscle cramp	OR 13.32	95%CI 1.71 to 103.74	p=0.01	1 study
Nausea	OR 4.87	95%CI 4.13 to 5.74	p<0.00001	13 studies
Peripheral edema	OR 2.08	95%CI 1.01 to 4.28	p=0.05	1 study
Syncope	OR 1.90	95%CI 1.09 to 3.33	p=0.02	5 studies
Tremor	OR 6.82	95%CI 1.99 to 23.37	p=0.002	2 studies
Vertigo	OR 3.95	95%CI 1.08 to 14.46	p=0.04	1 study
Vomiting	OR 4.82	95%CI 3.91 to 5.94	p<0.00001	11 studies
Weight loss	OR 2.99	95%CI 1.89 to 4.75	p<0.00001	4 studies

Cochrane Database of Systematic Reviews
2006, Issue 1. Art. No.: CD005593. DOI: 10.1002/14651858.CD005593

NON-PHARMACOLOGICAL MANAGEMENT

On the basis of nature of symptoms, NPTs can be categorized into

Cognitive / emotion – oriented interventions	Behavior management techiques (BMT)	Sensory stimulation interventions	Other psychosocial interventions
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Reminiscence therapy

discussion of past activities, events and experiences with another person or group of people

Use materials such as newspapers, photo & other familiar items from the past to stimulate memories and enable people to share and value their experiences

Group sessions

- To improve interaction

Individual sessions

- Life review sessions, in which the person is guided chronologically through life experiences and encouraged to evaluate them

A way of increasing levels of well-being and providing pleasure and cognitive stimulation

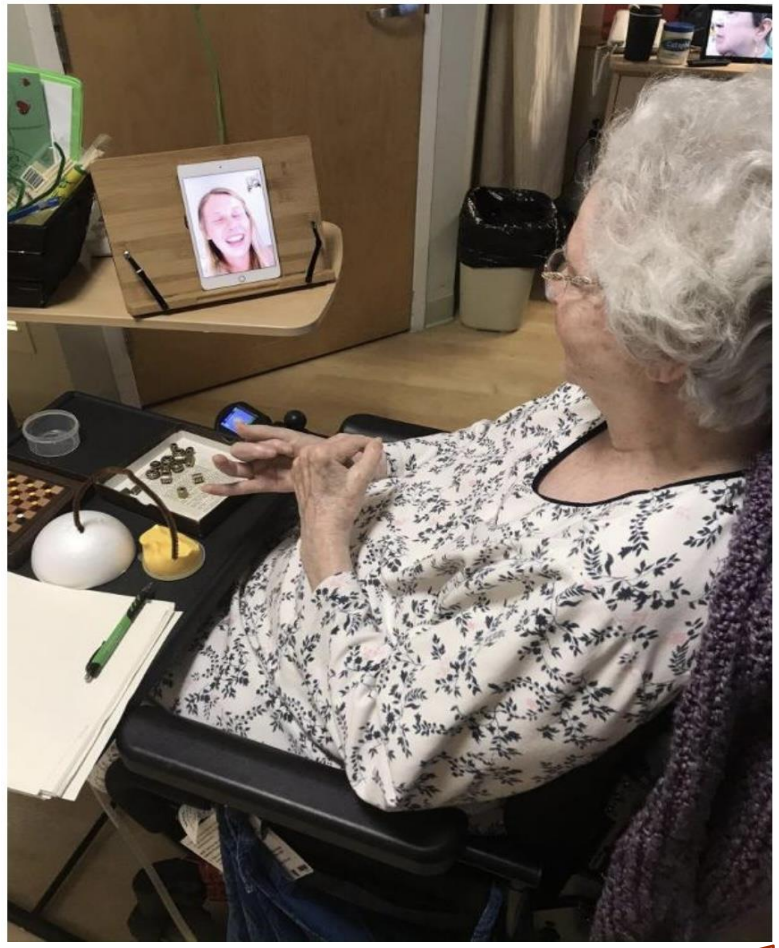
Assists in reducing depression in older people

EVIDENCES OF REMINISCENCE THERAPY

O' Donovan (1993)	There is only little indication of cognitive improvement
Gibson (1994)	Improvements in behavior, well-being, social interaction, self care and motivation
Systemic review 4 RCTs – 144 subjects	Three of RCTs assessed behavioral symptoms & found no effect of reminiscence therapy on these symptoms.. One RCT (N=17) compared the effects of 12 individual weekly sessions of reminience therapy with no treatment , and found statistically **significant improvements in depression** at 6 wks in the treatment group but found no differencess in other behavioral symptoms between groups

SIMULATED PRESENCE THERAPY (SPT)

- Attempts to keep the environment of a patient with dementia as familiar as possible to reduce anxiety and distress
- Involves making a recording of a familiar person and playing it to the patient
- The recording voice is usually reassuring but the content can be varied depending upon the interests of the individual patient concerned.



Evidences

A meta-anlysis - a statistically significant effect of SPT on disruptive, agitated or depressed behaviors from pre to post intervention, but this analysis was based on 3 small experimental studies (ranging from 6 to 9 subjects each) and one small RCT (N = 30)

VALIDATION THERAPY

A communication approach to dementia treatment

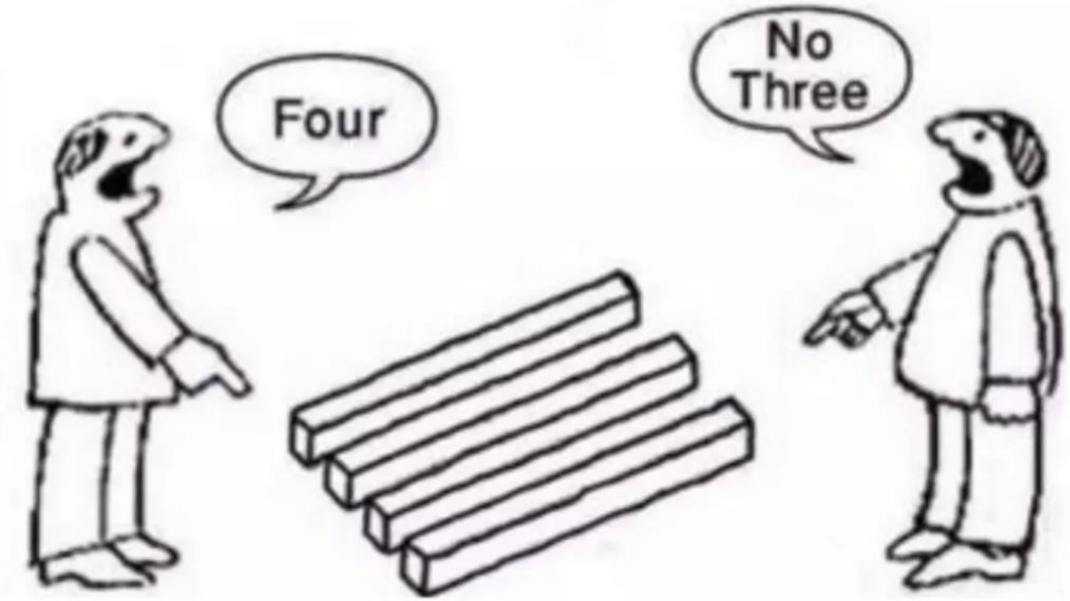
- Uses empathy and understanding
- Help the person with dementia to feel heard and maintain their dignity
- Caregiver listens carefully to feelings underlying behavior of those with late stage dementia
- Eg;" your feeling are valid and important."
- "I hear you, and I'm here for you."
- "You are not alone in experiencing this."
- "It's okay to feel a mix of emotions about this situation."

VALIDATION THERAPY

It was suggeted by its originator, Naomi Feil, that some of the features associated with dementia such as repetition and retreating into the past were in fact active strategies on the part of the affected individual to avoid ***stress, boredom and loneliness***

The idea – to validate or accept the values, beliefs and reality of the person suffering from dementia .

The key is to agree with them but to also use conversion to get them to do something else without them realizing they are actually being redirected.


Four
No
Three

EVIDENCES OF VALIDATION THERAPY

One systematic review

3 RCTs (total 146 subjects)

Comparison groups

1. Usual care
2. Reality orientation therapy
3. Social contact

A **significant difference in behavior assessment** tool scores in favor of validation therapy compared to usual care .

There were no significant differences between validation therapy and reality orientation therapy.

In a study of 88 patients from four nursing homes, a **beneficial effect on depression** was observed at 12 months in favor of validation therapy compared with social contact but

there was no differences compared to usual care.

REALITY ORIENTATION THERAPY

- Most widely used management strategies for dealing with people with dementia
- It aims to help people with memory loss and disorientation by reminding them of facts about themselves and their environment.
- Can be used both with individuals and with groups
- In either case, can be oriented to their environment using a range of materials and activities.
- This involves consistent use of orientation devices such as sign posts, notices and other memory aids.

TIPS FOR USING REALITY ORIENTATION THERAPY

TALK ABOUT ORIENTATION

Day of the Week

Time of day

Today's Date

Season

USE PEOPLE'S NAMES FREQUENTLY

Can help them recognize themselves and the people they love around them without having to ponder

REFER TO CLOCKS AND CALENDARS OFTEN

DISCUSS CURRENT EVENTS

Helps them connect and engage with their surroundings. Reinforces a timeline of events.

PLACE SIGNS AND LABELS ON DOORS, CUPBOARDS, AND OTHER OBJECTS

ASK QUESTIONS ABOUT PHOTOS OR OTHER MEMORIES

FROM HTTPS://WWW.VERYWELLHEALTH.COM/TREATING-ALZHEIMERS-DISEASE-WITH-REALITY-ORIENTATION-98682#:~:TEXT=HOW%20CAN%20YOU%20USE%20A,MAKE%20THEM%20FEEL%20SELF%2DCONSCIOUS.

EVIDENCES OF REALITY ORIENTATION THERAPY

- Systematic review and meta-analysis of 6 RCTs, with total of 125 subjects.
- Results were divided into 2 subsections : cognition and behavior
- Change in **cognitive and behavioral outcomes** showed a significant effect in favor of reality orientation.
- Reality orientaion sessions could **increase people's verbal orientation** in comparison with untreated control groups . (Bleathman & Morton, 1988)
- Has also been claimed that reality orientation can remind the participants of their deterioration (Goudie & Stokes , 1989)

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BEHAVIOR MANAGEMENT TECHIQUES (BMT)

- Based on principles of conditioning and learning theory using strategies aimed at suppressing or eliminating challenging behaviors

➢ Behavioral analysis – the starting point

✓ requires a period of detailed assessment in which triggers, behaviors and reinforces

(also known as the ABC : antecedents, behaviors and consequences) are identified and their relationship made clear to the patient

✓ the therpist will often use chart or diary to gather information about the manifestations of a behavior and the sequence of actions leading up to it

➢ Emerson (1998) suggests focusing on 3 keys when designing an intervention

1) Taking account of the individual's preferences
2) Changing the context in which the behavior takes place
3) Using reinforcement strategies and schedules that reduce the behavior

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ACUPUNCTURE

- Acupuncture is the stimulation of specific acupoints along the skin of the body involving various methods such as application of heat, pressure, or laser or penetraion of thin needles.
- It is a key component of traditional Chinese medicine which aims to treat a range of conditions and has been used for over 3,000 years.
- It is a form of complementary and alternatice medicine.

Evidences

- ✓ One systematic review evaluated acupuncture in patients with vascular dementia.
- ✓ 17 RCTs were included but none of it qualifed for the review.
- ✓ The effectiveness and safety of acupuncture could not be analyzed.

AROMATHERAPY

- Aromatherapy is a form of alternative medicine that uses volatile plant materials, known as essential oils, and other aromatic compounds for the purpose of altering a person's mind, mood, cognitive function or health.

Evidences

- Systematic review found that aromatherapy was associated with decreased agitation among dementia patients

LIGHT THERAPY

Light

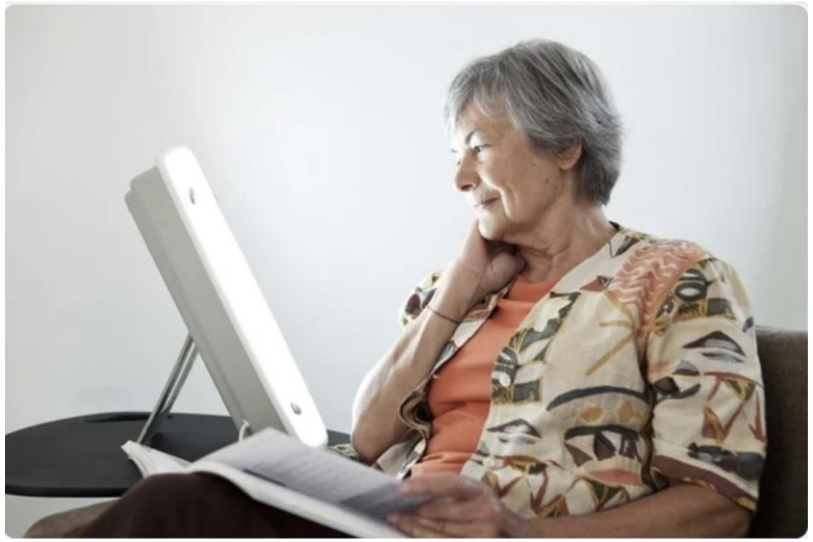
stimulate

Suprachiasmatic nuclei (SCN) of the hypothalamus

In dementia, degenerative changes in the SCN

Disturbances of circadian rhythm

Endogenous circadian rhythm of sleep



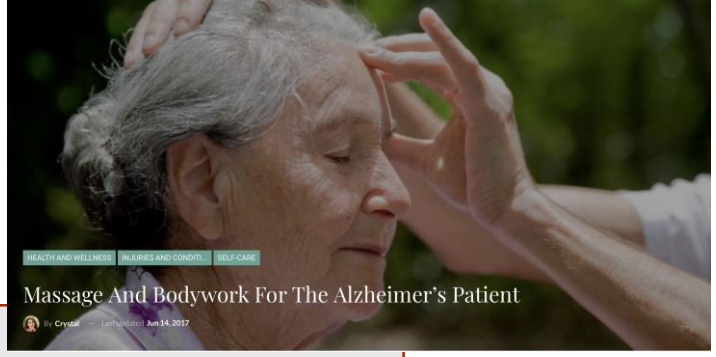
EVIDENCES OF LIGHT THERAPY

- 3 recent controlled trials have been published with some evidence for **improving restlessness** and with particular **benefit for sleep** disturbances (Haffmanns et al, 2001)

- An older systematic review included four studies of bright light therapy, three of which reported **beneficial effects on agitation and nocturnal restlessness** during bright light treatment.

- the studies were limited by small sample size (N < 24) and three of studies had samples of 10 subjects or fewer.

MASSAGE/TOUCH THERAPY



Aimed at reducing depression, anxiety, aggression and other related psychological and behavioral manifestations

Evidences

- One RCT of 42 institutionalized patients with organic brain syndrome compared verbal encouragement with touch to verbal encouragement alone during meals and found the touch therapy was associated with a significant increase in mean calorie and protein intake.

- The second RCT assessed the effect of hand massage vs calming music and simultaneous hand massage and calming music vs no intervention (68 participants)

Found a greater decrease in agitated behavior (CMAI score) in the groups receiving hand massage compared to the group receiving no treatment.

MUSIC THRERAPY

- Music therapy can potentially enhance cognitive skills as well as social / emotional skills and may also serve as an alternative to medication for managing behavioral symptoms of AD.

- Wide range of music interventions
  - listening to different types of music
  - Instrument playing
  - Group exercise while listening to music.

EVIDENCES OF MUSIC THERAPY

- Gerdner (2000) reports that agitation was significantly less frequent during and after music therapy.
- Systematic reviews concluded that music therapy decreases agitation in the short-term, although there was no evidence of long – term effects.
- A systematic review of eight studies - use of preferred or individualized music found reductions in agitated behaviors that were statistically significant in all.

SNOEZELEN MULTISENSORY STIMULATION THERAPY (MSS)

- It uses multiple stimuli (lights, tactile surfaces, music, aroma) during treatment session aimed at stimulating the primary senses of sight, hearing, touch, taste and smell.
- Interventions generally occur in specially designed rooms with a variety of sensory based materials.
- It has become a popular intervention for behavioral symptoms in persons with dementia.

SNOEZELEN ROOM

EVIDENCES OF MSS

- Systematic reviews identified four additional RCTs and reported mixed results.
- One study administered MSS in specially designed rooms in 30-60 minute sessions and found that during the four-week treatment period.
  - *Disruptive behavior outside the treatment setting briefly improved but did not last once the treatment had stopped.*
- Two studies conducted MSS sessions for 30 – 60 minutes for 3 consecutive days and found
  - *subjects were less apathetic when remaining in a multisensory stimulation room compared with remaining in the living room or receiving activity therapy.*
- One small (N=20) repeated measures study set in a day-care center and mental health nursing home exposed patients to three 40 minutes sessions of either MSS or reminiscence therapy and *found*
  - *no significant differences in behavior symptoms during or after treatment.*

TRSNSCUTANEOUS ELECTRICAL NERVE STIMULATION (TENS)

- TENS is the application of an electrical current through electrodes attached to the skin.
- Short, pulsed electrical currents are generated by a portable pulse generator and delivered across the intact surface of the skin through conditioning pads called electrodes.
- Although TENS is not routinely used for the treatment of dementia, several studies in Netherlands and one study in Japan suggest that TENS applied to the back or head may *improve cognition, behavior and sleep disorders* in patients with Alzheimer's disease or multi-infarct dementia.

EVIDENCES OF TENS

- one systematic review of the effectiveness of TENS in the treatment of dementia has been performed.

➢ The review reported that TENS produced a stastistically significant imporvement in *delayed recall of eight words* in one trial, *face recognition* in two trials and *motivation* in one trial, but there were *no significant effects on sleep disorders or behavior disorders* evaluated immediately after treatment or at six-week post –treatment.

Although a number of studies suggest that TENS may produce **short lived improvements in some neuropsychological or behavioral aspects of dementia**, the limited presentation and availability of data from these studies does not allow definite conclusions on the possible benefits of this intervention.

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ANIMAL ASSISTED THERAPY (AAT)

AAT is a goal-directed intervention in which an animal is an integral part of the treatment process.

<u>Benefits</u>

- Positive physiological effects – (e.g - decrease HR & BP)
- Mental stimulation – (e.g recall memories)
- Feelings of acceptance and good rapport
- Outward focus
- Opportunities for empathy and nurturing
- Increased motivation
- Entertainment and socialization

Evidences

Several small studies suggest that the presence of a dog **reduces aggression and agitation**, as well as **promoting social behavior** in people with dementia.

PHYSICAL EXERCISE

In early to mild stage of dementia

- Gardening
- Music and dance
- Seated exercises (turning the body from side to side, raising the heels & toes, bending the arms & legs, bicycling the legs, making circles with the arms, raising the opposite arm & leg, practising moving from sitting to standing)
- Swimming
- Tai chi
- walking

PHYSICAL EXERCISE

In the later stages of dementia

- When getting up or going to bed, move along the edge of the bed, in the sitting position, until the end is reached. This helps exercise the muscles needed for standing up from a chair.
- Balance in a standing position. This can be done holding onto a support if necessary. This exercise helps with balance and posture.
- Sit unsupported for a few minutes each day. This helps to strengthen the stomach and back muscles used to support posture. This activity should always be carried out with someone as there is a risk of falling .

PHYSICAL EXERCISE

In the later stages of dementia

- Lie as flat as possible on the bed for 20-30 minutes each day. This exercise allows for a good stretch and gives the neck muscles a chance to relax.

- Stand up and move regularly. Moving regularly helps to keep leg muscles srong and maintain good balance.

6 Exercises for Strength and Flexibility

Physiotherapists say these simple exercises can help improve strength and movement. Try them daily or at least twice a week.

For every exercise sit up straight in a chair. If possible, sit away from the back of the chair and have your feet flat on the floor.

- Make sure the chair you use is sturdy
- Wear supportive shoes
- If you experience chest pain, dizziness or shortness of breath, stop and call your GP or call 111
- A slight soreness the day after exercise is quite normal

NHS Greater Glasgow and Clyde

Supported by Alzheimer Scotland Action on Dementia

Endorsed by Chartered Society of Physiotherapy

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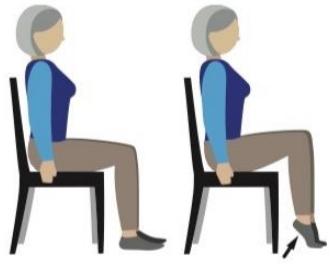


Heel Raises

Lift your heels off the floor and lower them.

Repeat 10 times.

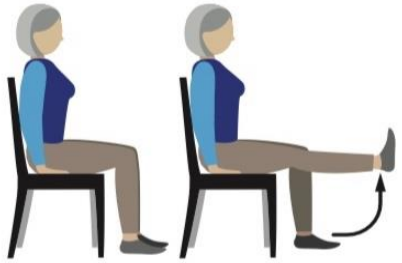
2

Ankle Circles

Circle your ankles 10 times. Repeat in the opposite direction.

Repeat with other leg.

3



Straighten Knee

Straighten your knee and pull your toes up towards you. Hold for 5 seconds. Slowly relax to starting position and repeat 5 times.

Repeat with other leg.

4

Seated Marching

Lift your feet off the floor one at a time.

Count to 20.

5

Arm Reaching

Place hands on your shoulders, reach up to the ceiling.

Repeat 10 times.

6

Seated Rowing

Start with your arms straight out in front. Pull your arms back in a rowing motion.

Repeat 10 times.

Developed by NHSGGC Mental Health Physiotherapists

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6 Exercises for Strength and Balance

Physiotherapists say these simple exercises can help improve co-ordination and balance. Get on your feet and try them daily – or at least twice a week!

- Make sure the chair you use is sturdy
- Wear supportive shoes
- If you experience chest pain, dizziness or shortness of breath, stop and call your GP or call 111
- A slight soreness the day after exercise is quite normal

NHS Greater Glasgow and Clyde

Supported by Alzheimer Scotland Action on Dementia

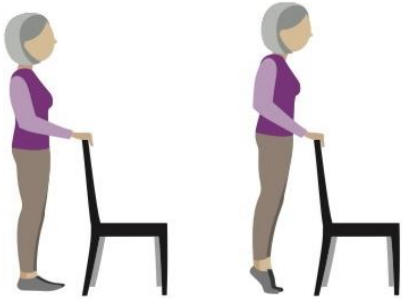
Endorsed by Chartered Society of Physiotherapy

1

Sit to Stand

Stand up. Sit down.
Repeat 10 times.

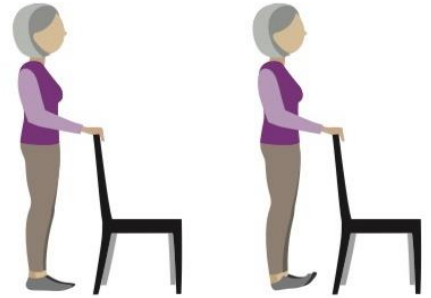
2



Heel Raises

Lift your heels and lower them.
Repeat 10 times.

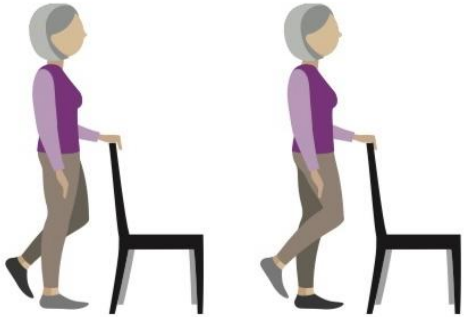
3



Toe Raises

Lift your toes and lower them.
Repeat 10 times.

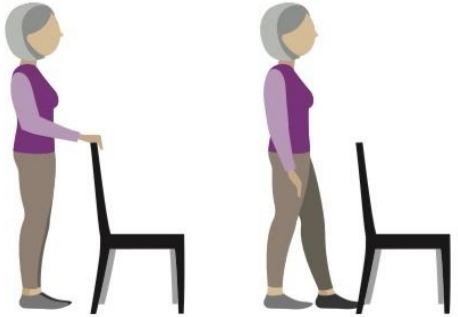
4



One Leg Stand

Stand on one leg for 10 seconds.
Stand on the other leg for 10 seconds.

5



Heel Toe Stand

Put one foot in front of the other like standing on a tightrope. Hold for 10 seconds.
Swap legs around. Hold for 10 seconds.

6

Heel Toe Walking

Walk one foot in front of the other like walking on a tightrope.
Do 5-10 steps.

Developed by NHSGGC Mental Health Physiotherapists

BENEFITS OF PHYSICAL EXERCISE

- Improving physical function – maintaining muscle strength and joint flexibility can be a way of helping people maintain independence for longer.
- Helping to keep bones strong and reducing the risk of osteoporosis
- Improved cognition – recent studies have shown that exercise may improve memory and slow down mental decline
- Improving sleep
- Opportunities for social interaction and reducing the feeling of isolation
- Reducing the risk of falls – physical acitivity can improve strength and balance and help to counteract the fear of falling.

EVIDENCES OF PHYSICAL EXERCISE

- Eggermont et al. (2006) review includes a wider range of trials which shows that, though a number of studies found that ***exercise improved affective and functional outcomes,*** the overall strength of this conclusion is limited by inconsistencies among trials.
- Some studies are giving consistent evidence that exercise programs can ***improve sleep*** in persons with dementia.
- ***Frequent exercise sessions*** were more likely to lead to improvements in sleep compared to more sporadic sessions.
- Intereventions of ***longer duration*** may have a benefit on functional ability in dementia patients.

CONCLUSION

- The field of dementia care is ever expanding.
- It is prudent that Non-Pharmacological Treatments become an integral part of dementia management and rehabilitation programs.
- One must always combine multiple approaches together as no one method fits in the long-term management of dementia.
- Holistic team appoach is ideal (psychiatrist, psychotherapist, occupational therapist, medical healthcare professional, nutritionist, physiotherapist, and family members)
- Medical management must be aimed at synerging with non-pharmacological management to enhance the long-term management and quality of life of patients with dementia.

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THANK YOU