Cognitive Therapy and Family Intervention for Patients with Dementia and Psychosis

Gundugurti Prasad Rao, Palanimuthu Thangaraju Sivakumar¹, Shrikant Srivastava², Roop Chand Sidana³
Consultant Psychiatrist, Asha Hospital, Hyderabad, Telangana, ¹Department of Psychiatry, National Institute of Mental Health and Neurosciences, Bengaluru, Karnataka, ²Department of Geriatric Mental Health, K. G. Medical University, Lucknow, Uttar Pradesh, ³Tekchand Sidana Memorial Hospital, Ganganagar, Rajasthan, India

INTRODUCTION

The population of older adults is increasing rapidly due to global population aging in the background of increasing life expectancy and reducing mortality rate. This phenomenon is projected to be more rapid in developing countries like India in the next few decades. The increase in the population of older adults is also associated with increasing prevalence of chronic noncommunicable diseases including dementia.

Dementia is a condition characterized by progressive cognitive decline with significant impairment in the ability to do functional activities independently. Dementia has multiple causes that contribute to the existence of several subtypes with varying clinical presentation and outcome. Alzheimer’s disease (AD) is the most common subtype of dementia (50%–60%). Vascular dementia (VD), diffuse Lewy body dementia (DLBD), frontotemporal dementia (FTD), and mixed dementia are some of the other important types of dementia. The recent revision of classification – Diagnostic Statistical Manual-V refers dementia as major neurocognitive disorder.

Dementia is emerging as a major public health priority due to increasing prevalence, increased risk for mortality, high level of disability, caregiver burden, and cost burden. The current estimates of global prevalence of dementia are nearly 47 million with nearly 4.6 million patients with dementia in India. The incidence rate of dementia is also alarming with one new case estimated to occur every 3 seconds. The global prevalence of dementia is estimated to increase to 131 million in the year 2050. The global economic cost for care of persons with dementia is estimated to increase from 818 billion USD to 2 Trillion USD by the year 2050.

Behavioral and psychological symptoms such as delusions, hallucinations, depression, and agitation are common in persons with dementia. They contribute to significant distress in patients as well as caregivers. They are also an important reason for institutionalization. The major concern in the care of persons with dementia is the lack of effective disease modifying drugs and modest efficacy of currently available symptomatic drug treatments.

Considering the low awareness about dementia in India, there is huge treatment gap for even the diagnosis and pharmacological treatment of persons with dementia. The important focus of treatment in dementia is the improvement of the quality of life and well-being of patients as well as the caregivers.

Psychosocial interventions such as cognitive therapy and family interventions have been evaluated in persons with dementia and their caregivers. However, there are important challenges in improving the access for psychosocial...
interventions for persons with dementia. This clinical guideline will discuss about the potential role for these psychosocial interventions in the management of persons with dementia particularly in Indian context.

**ASSESSMENTS AND EVALUATION OF THERAPY REQUIRED**

Patients with dementia need comprehensive assessments and evaluation to facilitate appropriate management (Refer Table No.1). The detailed guidelines for assessment and evaluation of patients with dementia are available in the Indian Psychiatric Society Clinical Practice Guidelines for Dementia, 2018 (Shaji et al., 2018). Briefly, the assessment and evaluation should confirm the diagnosis of dementia, identify any potentially treatable cause for dementia, and assess the extent of impairment in cognition, behavior, and activities of daily living. The assessment should also identify medical and psychiatric comorbidities that need to be treated. Assessment of the needs of the patient as well as the caregivers will also be required.

**ASSESSMENT OF COGNITIVE FUNCTION**

Dementia is characterized by significant impairment in cognitive functions, behavior, and activities of daily living. The domains of cognitive functions include attention and concentration, memory and new learning, visuospatial orientation, language, executive function, and social cognition. The extent of involvement of cognitive domains depends on the subtype of dementia, stage of severity, predominant region of brain atrophy, cognitive and brain reserve of the individual, etc.

Assessment of the extent of cognitive impairment and the domains involved can be done through the detailed clinical history collected from the patient and informant (more information from the informants in the later stages of dementia) as mentioned in Table 2 and Table 3. Direct assessment of cognitive function can be done using bedside cognitive assessments, brief structured instruments for cognitive assessment, or detailed neuropsychological evaluation (more useful in the early stage of dementia).

Some of the standard instruments for cognitive assessment that can be potentially useful in Indian settings are listed in Table 4.

Several bedside cognitive tests can be useful in the evaluation of cognitive impairment. These are particularly useful in outpatient settings when there are inadequate resources and time to support detailed cognitive assessment using structured instruments or detailed neuropsychological assessment. Some of these bedside cognitive tests are listed in Table 5.

Comprehensive assessment and understanding of the extent of cognitive impairment will help in planning the psychosocial interventions that are suitable for the individual. This will also be helpful in educating the family caregiver to assist in home-based intervention.

Brief cognitive assessments need to be repeated periodically (at least every 6 months to understand the progression and plan appropriate intervention)

**Assessment of behavior and psychological symptoms of dementia**

Most of the patients with dementia develop behavioral or psychological symptoms at some point of the course of illness. Many caregivers perceive behavior and psychological symptoms of dementia (BPSD) as more distressing than the impairment in cognitive functions. Some of the common behavioral problems noted in persons with dementia are apathy, agitation, aggression, delusions, hallucinations, sleep disturbances, wandering, etc.

Comprehensive understanding of BPSD is required for appropriate management. The assessment of BPSD includes collection of detailed clinical evaluation of the patient and caregiver. Structured instruments such as neuropsychiatric inventory and Cohen's Mansfield Agitation Inventory can also be used for assessing the severity and profile of the BPSD. The focus of the management will be to understand the antecedent, behavior, and consequences (ABC analysis) for each of the BPSD and plan appropriate intervention for the same. BPSD can also be understood as a form of communication of need perceived by the patient. Patients may communicate their distress and need for pain relief through behavioral symptoms.

The first-line management recommended for BPSD is nonpharmacological treatment. Medications for treatment of BPSD have limited effectiveness and are associated with increased risk for adverse effects. Initiation of medications for BPSD is considered when it is very severe or nonpharmacological interventions have not been either helpful or not feasible. Cognitive therapy and family interventions are likely to be helpful in the management of BPSD.

**Assessment of activities of daily living**

Patients with dementia have impairment in the ability to do independent/complex activities of daily living such as cooking, managing medication, transportation, and finance. In the moderate and severe stage of dementia, they may also have difficulties in the basic activities of daily living such as eating, dressing, mobility, and attending toilet needs. Periodic assessment of the ability to do independent functional activities is essential to adapt the intervention methods and objectives of the treatment depending on the progression of the severity.
Cognitive therapy and family intervention for patients with dementia and psychosis

Role of psychosocial interventions in dementia

Psychosocial interventions are an essential component in the management of dementia. Pharmacological treatment of dementia is primarily for symptomatic treatment of the cognitive symptoms. Medications approved for the management of dementia (cholinesterase inhibitors) have limited effectiveness in Alzheimer’s dementia, DLBD, Parkinson’s disease-related dementia, and mixed dementia (vascular and Alzheimer’s disease). There are no effective drugs that have been approved for clinical use in FTD, VD, and Creutzfeldt-Jakob dementia.

Considering the impact of dementia in the life of the patient as well as the caregiver, there is a definite requirement of psychosocial interventions to improve the quality of life and well-being in persons with dementia and their caregivers. Many patients with dementia require assistance of professional caregivers if the requirements of care are difficult to be met by the family caregivers. Psychosocial interventions are also important in preparing the patient and family for managing the transitions in care environments.

COGNITIVE THERAPY

Cognitive impairment being the defining feature of dementia, interventions to promote and maintain cognitive function is considered as an important component in the management of dementia. In view of increasing awareness, at least to some extent, patients have started seeking help in the initial stages of dementia. Still large proportion of patients, particularly from rural background, consider the initial cognitive symptoms of dementia as part of normal aging and do not seek help till the moderate and severe stage of dementia. There is increasing evidence for the role of cognitive activities and social engagement in promoting the neuroplasticity and cognitive reserve in patients with dementia.

Maintenance and improvement of cognitive function even to a marginal extent can contribute to a meaningful clinical benefit in a condition such as dementia characterized by progressive cognitive decline. There are many randomized controlled trials that have evaluated the efficacy of cognitive interventions for the improvement of cognitive function in dementia. The review of available evidence indicates mixed benefit with some interventions showing marginal positive benefit, others showing no significant difference. There are several methodological issues that can influence the findings of these studies. Many studies are for brief duration ranging from few weeks to few months. There is a significant challenge in ensuring the blinding in studies evaluating cognitive interventions. Patients included in these studies could also have significant heterogeneity in the stage of dementia, associated comorbidities as well as their background characteristics. The heterogeneity could even be at the level of brain atrophy and the brain or cognitive reserve even if they have homogeneous level of severity of dementia. There is also significant variability in the method of cognitive interventions and the assessment of outcome measures. There is limited evidence on the efficacy and clinical utility of these interventions in patients with dementia from developing countries like India. Majority of these studies have been done in developed countries like United Kingdom. Many of these interventions have been conducted predominantly as a group intervention in a small group based in hospital, day care, or residential care centers. Unlike developed countries, the proportion of patients with dementia having access to institutional care facilities are very limited in India. There have been few clinical trials that have evaluated the efficacy of these interventions individually with either the patient or caregiver. However, the strength of current evidence for effectiveness of these interventions as individual therapy is very limited. It is preferable to do preparatory assessments [Table 6] to facilitate effective implementation of cognitive therapy in persons with dementia.

Among the structured cognitive interventions, the most commonly evaluated type of interventions includes the following:

• Cognitive stimulation therapy (CST)
• Cognitive rehabilitation
• Cognitive training

COGNITIVE STIMULATION THERAPY

CST is an evidence-based intervention that is recommended for individuals with mild or moderate stage of dementia. This intervention attempts to engage and stimulate individuals with dementia using a set of activities that are usually delivered in a small group. The group based
The targeted intervention usually included 14 sessions done on a weekly basis, with each session lasting for nearly 45 min. CST can be delivered by any professional (care worker, nurse, and psychologist) with some training about the intervention. CST sessions can be extended for providing maintenance sessions. Recently, individual CST has also been developed and studied. In patients who cannot attend group sessions, the caregiver can deliver the individual CST at home. CST has also been adapted to other cultural settings to enable effective and appropriate implementation across cultures. The nature of the activities needs adaptation to suit the participants from a particular background. The effectiveness of CST has been demonstrated in several randomized controlled trials with the effect size comparable to the intervention with cholinesterase inhibitors for those with mild to moderate AD. In India, the adaptation of CST has been completed recently by a dementia research team at Chennai. The process of adaptation involved getting the opinion from professionals and experts as well as family caregivers. The intervention module was pilot tested in a day care center and was modified further based on the feedback from participants. There is no evidence on efficacy of CST from controlled trials conducted in Indian settings till date. However, there is evidence of CST efficacy from non-European settings like Japan and Africa.

Controlled trials have used waitlist control or active control group as the comparison intervention for evaluating the efficacy of CST in dementia. Nonpharmacological interventions have a specific challenge in choosing an appropriate control group. It is difficult when compared to the placebo arm for a drug trial. The active control group can control for the time spent and other nonspecific effects of the active intervention. However, the active control group can limit the ability to detect the efficacy of the intervention group. Efficacy studies of CST have also shown better effect size in the studies using waitlist/treatment as usual control group when compared to the studies using active control group.

Meta-analysis of controlled trials of CST has indicated a moderate effect size when Mini Mental State Examination is the outcome measure. The effect size is even lower with Addenbrooke’s cognitive examination as the outcome measure. Another concern is the clinical significance of the effectiveness even though it is statistically significant. However, there is an argument that in conditions like dementia, there is no evidence for any interventions with significantly large effect size. The appropriateness of the outcome measure also needs to be considered in these studies. The possibility of benefits in quality of life and well-being with CST needs to be considered as a priority.

The cost-effectiveness of CST intervention in dementia has also been studied. This study concluded that CST is cost-effective when cognition or quality of life is considered as the outcome measure. Health and Technology assessment
settings. It can be applied by a professional caregiver or a family caregiver. Effective implementation of RT requires adequate understanding of important events in the life of persons with dementia. The required materials to facilitate the discussion with the patient should also be collected. Digital RT using multimedia and pictures with significant value for the patient can be tried in the community as well as institutional settings.

### REALITY ORIENTATION THERAPY

Patients with dementia are likely to have difficulty in orientation to time, place and person, particularly in the moderate stages of dementia. The impact of having altered reality can lead to significant distress for the patient as well as caregivers. This can also be a contributing factor for significant behavioral problems. RO intervention can be used as a therapy used in persons with dementia for orienting them to time, place and person. Assistance to persons with dementia through RO is expected to help in the improvement of cognitive function and behavioral problems like depression. RO intervention can be delivered in the individual as well as group settings. Patients with dementia are likely to have difficulty in new learning and the effect of RO may not be sustained for long period of time. One of the important predictors for outcome of RO intervention is the duration of intervention. RO might be effective if there is a continuous and sustained intervention. However, some patients can have worsening of behavioral problems with the attempt to correct the reality of the patient. This intervention has been tried as a continuous intervention through family caregivers or using a classroom activity in a group setting. A recent meta-analysis has indicated significant efficacy of RO intervention for improvement of cognitive function. But it was not found to be effective for other outcome measures like depression and agitation. RO intervention can be used as a standalone intervention or as a component along with other interventions such as RT, cognitive training, or stimulation.

### COGNITIVE REHABILITATION

Cognitive rehabilitation uses individualized and person-centered approach to train the individual with dementia. The focus of the intervention is to develop compensatory methods to overcome specific functional disability. Usually, this approach is more relevant in the initial stages of dementia. The clinical application of this intervention is to promote retaining independence for a specific functional ability using this individualized approach. The evidence base for effectiveness of cognitive rehabilitation is quite limited compared to that of CST.

### COGNITIVE TRAINING

Cognitive training is theory based approach with focus on improving specific cognitive functions by repeated practice. This intervention uses computer based or manual activity to provide training on specific cognitive skills. The format

---

**Table 6: Preparatory assessments related to cognitive therapy in persons with dementia**

| Key information related to personal profile of the patient |
| Likes and dislikes of the patient |
| Hobbies and special skills |
| Details of significant events and experiences in the life of the patient |
| Collection of materials that will be useful for personalized therapeutic intervention (relevant photographs, videos etc.) |
| Willingness and feasibility for group intervention |
| Familiarity, comfort, and access to computers and other technology-assisted interventions |
| Experiences and response to similar interventions in past |

---

**Table 7: Components of cognitive stimulation therapy**

| Reminiscence |
| Reality orientation |
| Physical activities |
| Cognitive activities |
| Recreational activities (music, games etc.) |

---

of NHS (UK) has also indicated that CST is significantly cost-effective in the management of dementia.

### REMINISCENCE THERAPY

Reminiscence therapy (RT) is one of the earliest psychosocial interventions in persons with dementia that has been widely used and relatively well studied. RT attempts to discuss the important events, memories and experiences from the life of persons with dementia. This is done as simple reminiscence or through a structured life review. The focus on long term memories in RT enables the person with mild or moderate dementia to participate actively as they are likely to have better remote memory than recent memory. This intervention can be done individually with the patient or as a group activity. RT has been studied in the community settings and care home settings. The important outcome variables that have been assessed in RT are cognition, mood, communication and quality of life. The evidence from multiple randomized controlled trials indicates possible positive effect for RT. However, the findings are inconsistent, and there are several methodological issues that need to be considered. The structure and content of RT used across studies are heterogeneous and hence difficult to compare. Application of RT across these studies has varied duration, format, and outcome measures. There is an urgent requirement for standardization of the content for this intervention and develop structured manuals to ensure homogeneous trials.

Recent studies are attempting to utilize the developments in digital and multimedia fields to attempt digital RT. There is lack of adequate number of studies evaluating RT using this approach.

RT appears to be a very useful and simple psychosocial intervention that can be applied in the individual or group settings. It can be applied by a professional caregiver/
of the intervention could also use an adaptive strategy that enables progression to higher level of task after the completion of the initial level. The challenge with this approach is whether the training in a specific task can generalize in to the ability for doing related functional activities. There are several randomized controlled trials evaluating the efficacy of cognitive training. The available evidence does not indicate clear efficacy for improvement of cognitive function with cognitive training. There is also limited evidence for generalization of the gains achieved with this training in to functional ability in other activities. Clinical practice guidelines such as National Institute of Health and Care Excellence (NICE) guidelines clearly recommend that cognitive training should not be used in the treatment of persons with dementia as there is no clear evidence in favor of this approach. Furthermore, there could be negative effects for the patient as this is a performance-oriented approach that could expose the patient with cognitive impairment to face repeated failures in achieving the completion of a specific task.

**Family intervention**

Family plays the most important role in the management of dementia globally. Even in the developed countries, family caregivers provide support and care for majority of persons with dementia. Only around a third of persons with dementia from developed countries, particularly those in the advanced stage of dementia receive residential care in institutions. In the developing countries like India, the care of persons with dementia is almost entirely dependent on family caregivers. Very few patients with dementia receive assistance from formal caregivers either at home, day care or at residential care centers. There is no social security system that supports provision of formal care in persons with dementia. Hence there is requirement of partial support from family caregivers even for those receiving support from formal caregivers. The nature of dementia also does not restrict its effect to the individual alone. There is significant effect on the family as they must provide supervision, support and assistance in the care of persons with dementia.

Family intervention could focus on many aspects of dementia care. It can focus on promoting the understanding about dementia, management of BPSD, caregiver burden, addressing the conflicts in family related to the care of persons with dementia, guidance about legal and ethical issues related to dementia care, transition to formal care etc.

The family intervention can focus either on the needs of the dyad (persons with dementia and the family caregiver) or completely about the issues related to either of them.

Many intervention studies with family caregivers have used the approach of behavioral interventions to manage the BPSD. The unmet needs of the persons with dementia related to pain, hunger, or any other similar basic issues could contribute to BPSD.

The family caregiver is trained to recognize these issues and take necessary corrective action to manage the BPSD.

Family caregivers may develop depressive symptoms secondary to the caregiver burden and burnout. Since there is a requirement of family caregiver to provide long-term support, intervention to address the caregiver burden and depressive symptoms can help in the improvement of care in persons with dementia. This can also help in prevention or reduction in severity of abuse in persons with dementia.

Family intervention for persons with dementia requires following preparatory assessments [Table 8].

**Disclosure of the diagnosis**

Dementia is a condition having significant implication for the individual as well as family. Disclosure of the diagnosis needs to be done in a sensitive manner to communicate the challenges as well as providing realistic hope and confidence for effective management. Issue of disclosing the diagnosis of dementia to the affected individual is even more sensitive issue. Many family members may request the clinician not to discuss the implications of the diagnosis to the patient in view of the apprehension that it may increase distress and depression risk in them. This becomes an important issue particularly in the context of mild dementia and when the patient has some insight about the illness. Understanding the implications of the diagnosis may help the patient to plan important decisions about finance, property, advanced directives regarding future care, etc., when the patient is retaining capacity to take decisions. Therapist can attempt to address the concerns of the family about the benefits and risks associated with the disclosure of diagnosis to the patient. However, it would be important to check with the patient individually and explore their understanding about the illness, willingness, and eagerness to know more about the same. This issue needs to be handled sensitively in an individualized manner with the understanding of the cultural differences and individual preferences.

**Providing education and information about the illness**

Adequate understanding about the illness is the first essential step in the process of providing care for

| Table 8: Preparatory assessments related to family intervention in persons with dementia |
|---------------------------------------------------------------------------------------------------------------|
| Information about primary caregiver                       |
| Information about other stakeholders involved in the care of the patient                                    |
| Status of interpersonal relationship in the family prior and after the illness                              |
| Priority issues and perceived need from the perspective of different stakeholders                          |
| Attitude and acceptance of therapy by family caregivers                                                  |
persons with dementia. It is essential to educate the family caregivers about relevant aspects of the diagnosis, scope of treatment, expected course, and prognosis. Patients with dementia in the initial stages will be able to understand the information about the illness. It is important to assess the preference of the patient about the extent of information required to be known and provide appropriate information. Details of access to various resources available with additional information need to be shared with family caregivers. It is important to provide the relevant information to the primary caregiver as in many situations the patient may be accompanied by other relatives who are not their primary caregivers. Provision of education and information needs to be delivered over few visits in an individualized manner depending on their prior knowledge, current context and readiness of the caregivers and patient to process the information given. It would be appropriate to discuss sensitive issues with patient and caregivers separately with adequate privacy to facilitate proper discussion. Patients may be able to understand the emotions and get distressed even when they have significant limitations in understanding.

Clarifying myths and misconceptions
There are several myths and misconceptions about dementia and ageing that are strongly held by the public. It is important to specifically discuss about them and clarify about the facts to promote appropriate understanding in them. Some of the common myths and misconceptions about dementia are as follows:
- Dementia is often recognized as part of normal aging rather than a medical illness
- Since there is no curative treatment, there is no use in identifying and diagnosing dementia
- Relatively preserved remote memory indicates that the complaints of impaired recent memory in patient with dementia is not real
- The behavioral problems in persons with dementia are deliberate
- Patients with dementia need to be admitted in residential care for proper care.

Preparing the family for the implementation of the care plan
The care plan for the management of dementia needs to be discussed with the patient as well as all the other stakeholders in the family. There may be differences of views among the family members. These differences become a major factor in the care of the patient if the relationship among the family members is already strained. Family intervention involving all the stakeholders is essential to prepare the family for the implementation of the care plan.

Assisting the caregiver in the management of behaviour and psychological symptoms of dementia
Behavioral and psychological symptoms are the major issues affecting the quality of life in persons with dementia. BPSD is also an important predictor for institutionalization. Medications for BPSD have significant adverse effects and contribute to increased morbidity and mortality. Many of the BPSD symptoms may be managed effectively by behavioral management.

Family intervention has important role in the management of BPSD. In the community settings, primary caregiver needs to be educated about the behavioral analysis (Assessment of Antecedence, Behavior, and Consequences - ABC analysis).

Guidance on legal and ethical issues
Patients with dementia and their family caregivers may require guidance on many important legal and ethical issues related to the illness. In view of progressive cognitive impairment, person with dementia may develop impairment in mental capacity. Unlike other mental illnesses, the impairment of mental capacity in dementia is more likely to be permanent. Some of the common legal issues related to dementia are as follows:
- Difficulty in affixing signature in bank transactions and other legal documents
- Difficulty to manage finance and property
- Appearance as witness or managing the court proceedings
- Fitness to continue employment (particularly in young-onset dementia)
- Requirement of appointment of a legal guardian
- Elder abuse and cases under the provisions of the Maintenance and Welfare of Parents and Senior Citizens Act, 2007
- Appointment of nominated representative
- Making or implementing advanced directive.

Patients with dementia and their family members can avail free legal assistance through the Legal services authority at the District and Taluk level.

Family members of patients with dementia may need guidance and support related to understanding of ethical issues in dementia care such as implementation of palliative care approach and end of life care.

Management of caregiver burden
Providing care for persons with dementia can be stressful as many patients may require continuous supervision, assistance in daily activities and significant behavioral problems.

Majority of the primary family caregivers are women (spouse/ daughter/daughter-in-law). Many times, they must manage
additional responsibilities at home or in work place along with caregiving responsibility.

Caregivers need guidance and support for ensuring appropriate care of their own health and take assistance from all the resources possible.

**Discussion about formal care (day care/residential care)**
Dementia is one of the important reasons for institutional care globally. The transition to day care or residential care is a major decision that can be emotionally stressful for both patient and caregiver. These decisions need to be considered after proper planning. Family intervention can help in guiding the family caregivers to prepare themselves for implementation of the decisions related to this. Family intervention can also give information about various support services for dementia care.

**Management of feeding related issues**
Patients with dementia can develop swallowing difficulty in the advanced stages of dementia. This can lead to dilemmas related to ensuring nutrition and decision making related to invasive procedures like percutaneous endoscopic gastrostomy. Family intervention can help in providing guidance related to appropriate management of these issues.

Other areas that may be focused as part of the family intervention include:
- Management of continence related issues
- Orientation to palliative care approach
- Living well with dementia
- Facilitating access to welfare benefits
- Clarifying concerns about the genetic risk
- Specific concerns related to young onset dementia
- Addressing stigma about dementia.

**Formulating a treatment plan**
Persons with dementia require comprehensive evaluation and management. The treatment involves providing support and guidance to the patient and family for managing the transitions and changing needs through the course of illness. This requires adequate preparation of a treatment plan based on comprehensive assessment and discussion with the patient and family. The implementation of the treatment plan needs to be coordinated by a therapist or case manager to facilitate continuity of care. The treatment plan for psychosocial interventions is ideally integrated with the plan of pharmacotherapy for dementia and coexisting medical comorbidity.

**Choice of treatment settings**
Cognitive therapy and family intervention can be delivered in the community or institutional settings as individual or group intervention. Cognitive stimulation is preferably delivered as group intervention in the community, hospital, day care or residential care. It can be delivered as individual therapy either by a therapist or by the family caregiver, if group intervention is not feasible or the patient is not amenable.

Cognitive rehabilitation and cognitive training are generally delivered as individual interventions.

**Psychotherapeutic intervention as per the different phases of illnesses (acute, maintenance, etc)**
Cognitive therapy and family intervention for dementia needs to be adapted according to the phase of the illness and the severity of the condition. In the initial phase, the focus is on comprehensive assessment to understand the extent of involvement of various domains of cognitive function, impairment in functional ability, associated behavioral and psychological symptoms. The therapist must understand the strengths, weakness, likes, dislikes, important experiences, and events from the life history of the patient by collecting these details from the patient and family caregivers. The therapist must establish therapeutic relationship with the patient and caregiver through the interactions in the initial phase. The context of therapeutic intervention in a person with dementia can be very different compared to the interventions in adult patients with other psychiatric illnesses. Persons with dementia, particularly in the moderate or more advanced stages of dementia may have difficulty in understanding the nature of the therapeutic relationship. The therapist must overcome this challenge and work toward establishing therapeutic relationship with the patient. There is also a need for having flexibility in the implementation of the plan for therapeutic intervention depending on the cooperativeness and response of the patient. Several activities need to be explored to identify the appropriate activity that is potentially useful as well as interesting for the patient.

The session frequency will be more frequent in this phase. This can vary from multiple sessions in a week (usually in the institutional settings) to once in a week or fortnight. The frequency of the sessions can be reduced in the maintenance phase (once in 4–6 weeks). In the maintenance phase, the focus will be on implementation of activities that have been identified as useful and effective in the initial phase. Few new activities also need to be explored to avoid the monotony and boredom for the patient.

**When to stop treatment and how to avoid dependence**
In the context of dementia, therapeutic interventions such as cognitive therapy and family intervention needs to be continued in the long term as the nature of the illness is likely to be chronic and progressive. However, if the dementia has progressed to a severe stage and there is difficulty in meaningful interaction with the patient, therapy can be discontinued. Even in the advanced stages, the intervention with the family caregiver may have to be continued as there may be specific issues relevant for the
advanced stage of dementia that requires intervention. The therapeutic intervention can help in preparing the caregiver to become confident and equipped to manage the issues independently to the maximum possible extent. Facilitating caregiver support groups will help in caregivers helping each other based on their experiences and reduce dependency on the professional therapist.

In patients with dementia, dropout rate is very high even for regular follow-up. Caregivers often find it difficult to bring the patient for follow-up or maintenance therapy in view of significant frailty and disability in elderly patients with dementia. Use of technology for doing maintenance intervention and follow-up using telemedicine would be helpful in ensuring long-term follow-up and continuation of maintenance therapy.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES

1. Shaji KS, Sivakumar PT, Rao GP, Paul N. Clinical practice guidelines for management of dementia. Indian J Psychiatry 2018;60:S312-28.
2. Keogh F, Mountain G, Joddrell P, Lord K. Psychosocial interventions for community-dwelling people following diagnosis of mild to moderate dementia: Findings of a systematic scoping review. Am J Geriatr Psychiatry 2019;27:641-51.
3. Zucchella C, Sinforiani E, Tamburin S, Federico A, Mantovani E, Bernini S, et al. The Multidisciplinary approach to Alzheimer’s disease and dementia. A narrative review of non-pharmacological treatment. Front Neurol 2018;9:1058.
4. Ying J, Wang Y, Zhang M, Wang S, Shi Y, LiH, et al. Effect of multicomponent interventions on competence of family caregivers of people with dementia: A systematic review. J Clin Nurs 2018;27:1744-58.
5. Whitlatch CJ, Orsulic-Jeras S. Meeting the informational, educational, and psychosocial support needs of persons living with dementia and their family caregivers. Gerontologist 2018;58:58-73.
6. Scales K, Zimmerman S, Miller SJ. Evidence-based nonpharmacological practices to address behavioral and psychological symptoms of dementia. Gerontologist 2018;58:588-102.
7. Pickett J, Bird C, Ballard C, Banerjee S, Brayne C, Cowan K, et al. A roadmap to advance dementia research in prevention, diagnosis, intervention, and care by 2025. Int J Geriatr Psychiatry 2018;33:960-6.
8. Legiere LE, McNeill S, Schindel Martin L, Acorn M, An D. Nonpharmacological approaches for behavioural and psychological symptoms of dementia in older adults: A systematic review of reviews. J Clin Nurs 2018;27:e1360-76.
9. Jo K, Jhoo JH, Mun YJ, Kim YM, Kim SK, Kim S, et al. The effect of cognitive intervention on cognitive improvement in patients with dementia. Dement Neurocogn Disord 2018;17:23-31.
10. Carrion C, Folkvord F, Anastasiadou D, Aymerich M. Cognitive therapy for dementia patients: A systematic review. Dement Geriatr Cogn Disord 2018;46:1-26.
11. Abrahams R, Liu KPY, Bissett M, Fahey P, Cheung KSL, Bye R, et al. Effectiveness of interventions for co-residing family caregivers of people with dementia: Systematic review and meta-analysis. Aust Occup Ther J 2018;65:208-24.
12. Raghuraman S, Lakshminarayanan M, Vaitheswaran S, Rangaswamy T. Cognitive stimulation therapy for dementia: Pilot studies of acceptability and feasibility of cultural adaptation for India. Am J Geriatr Psychiatry 2017;25:1029-32.
13. Livingston G, Sommerlad A, Orgeta V, Costafreda SG, Huntley J, Ames D, et al. Dementia prevention, intervention, and care. Lancet 2017;390:2673-734.
14. Hill NT, Mowszowski L, Naismith SL, Chadwick VL, Valenzuela M, Lampi A. Computerized cognitive training in older adults with mild cognitive impairment or dementia: A systematic review and meta-analysis. Am J Psychiatry 2017;174:329-40.
15. Nehen HG, Hermann DM. Supporting dementia patients and their caregivers in daily life challenges: Review of physical, cognitive and psychosocial intervention studies. Eur J Neurol 2015;22:246-52, e19-20.
16. Benbow SM, Sharman V. Review of family therapy and dementia: Twenty-five years on. Int Psychogeriatr 2014;26:2037-50.
17. Van’t Leven N, Prick AE, Groeneewoud JG, Roelofs PD, de Lange J, PotAM. Dyadic interventions for community-dwelling people with dementia and their family caregivers: A systematic review. Int Psychogeriatr 2013;25:1581-603.