# 18 Psychotherapies and Non-pharmacological Interventions

Laura Kenkel and Caroline Giroux

## 18.1 Introduction

Many factors impact the mental health and quality of life of aging adults, particularly those residing in institutional settings. Geriatric patients may have experienced many losses, e.g., social connections upon retirement, the death of family members and/or friends, the reduction of independence, and the need to move into assisted living facilities [1]. Geriatric patients may also suffer from cognitive impairment, whereby the reduction of memory and reasoning skills adversely impacts independence and well-being [2]. The flowchart above in Fig. 18.1 displays many psychotherapeutic and non-pharmacological interventions available to improve coping with stressors and adaptation to losses.

Pharmacologic treatment is a standard approach for most psychiatric disorders, but there are many challenges to pharmacological treatment in geriatrics, e.g., pharmacokinetic (e.g., absorption, distribution, metabolism, excretion) changes, greater sensitivity to certain classes of medications (e.g., benzodiazepines, anticoagulants) [3], polypharmacy, and increased risk of adverse drug reactions [3] (Chap. 3: Overview of Pharmacology in Geriatrics). Adjunctive use or substitution of psychotherapy and other modalities for pharmacotherapy (when appropriate) is desirable given the aforementioned factors.

Aging adults have been found to accept psychotherapy as a treatment modality. One study (Hanson et al. 2008) examined aging adults' acceptance of cognitive therapy, antidepressant medication, or a combination of the two, for the treatment of depression. Geriatric patients were shown to find combination treatment more acceptable than either treatment alone [4]. A systematic review by Apóstolo et al. (2016) of non-pharmacological interventions for depression in aging adults indicated that cognitive behavior therapy, competitive memory training, reminiscence group therapy, problem adaptation therapy, and problem-solving therapy decreased depressive symptomatology, but did not lead to changes in secondary outcomes (cognitive function, quality of life) [5].

Research on the outcome of psychotherapy, specifically in geriatrics, has been studied, although to a lesser extent than in other populations. A 2015 systematic review by Jonsson et al. found very few studies which examined the cost-effectiveness, efficacy, and safety of psychological treatments for depressive disorder in adults

L. Kenkel (✉)
Department of Psychiatry and Behavioral Sciences, UC Davis Health System, Sacramento, CA, USA
e-mail: lekenkel@ucdavis.edu

C. Giroux
Department of Psychiatry and Behavioral Sciences, UC Davis Health System, Behavioral Health Clinic, Sacramento, CA, USA


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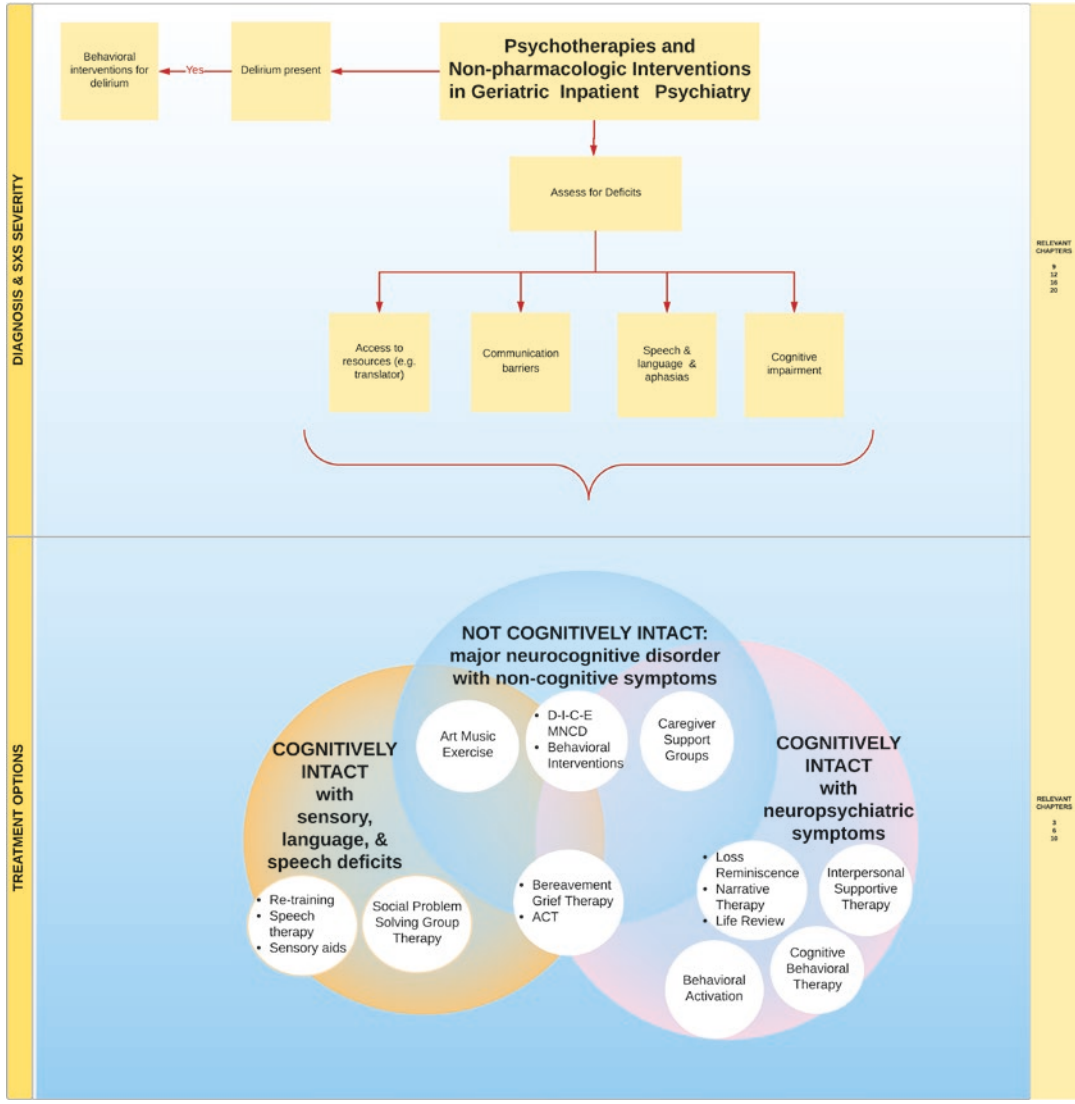


**Fig. 18.1** Psychotherapeutic and non-pharmacological interventions

aged 65 and over [6]. The review noted that the generalizability of findings must take into account the deficits related to old age, such as frailty and cognitive impairment, as well as differences in depressive disorder types [6]. Although patients with cognitive impairments may not be suitable for cognitive behavioral therapy (CBT), they may be more able to access problem-solving therapy (PST) [6].

A 2008 Cochrane review of psychotherapeutic treatments for aging adults with depression discovered relatively few trials appropriate for inclusion [7]. Based on a meta-analysis of five trials (153 participants), CBT was more effective than waiting list controls. But in three small trials, no significant difference in treatment effect was found between psychodynamic therapy (PT) and CBT. CBT, however, was found *superior* to active control interventions when the Hamilton Depression Rating Scale was used, and CBT was found *equivalent* to active control when the Geriatric Depression Scale was used to measure outcome [7].

Another review of psychological treatments of late-life depression examined 17 studies of

different therapeutic interventions (Francis et al. 2013). The therapeutic modalities included cognitive behavioral therapy, problem-solving therapy, interpersonal therapy, reminiscence therapy, and brief psychodynamic therapy [8]. This review found that all therapies resulted in reduction of depressive symptoms. But conclusions could not be drawn regarding the superiority of one modality over another nor how to determine which treatment should be used for which patient [8]. Only one study was conducted in an acute inpatient (medical inpatient) setting [8].

When psychotherapeutic approaches alone are not successful, a combination of medications and psychotherapeutic modalities has been found helpful, including deep interpersonal psychotherapy, induction of altered states of consciousness, and art therapy [12–14] (Chap. 16: Neuromodulation Interventions; Chap. 17: Medication Strategies).

There is a paucity of research addressing the use of psychotherapeutic techniques for aging adults with psychotic disorders. Nikolitch et al. concluded that it was feasible to include brief (10 minutes) mindfulness-based approaches for patients with psychotic disorder, given their vulnerability to experience distress from voices or paranoid ruminations [9]. The study found that brief group mindfulness interventions are well-tolerated and suitable for acutely hospitalized psychiatric patients, including those with acute psychosis [9]. Mindfulness-oriented interventions with an active component (e.g., tai chi, mindful walking) may be best suited for this population.

## 18.2 Clinical Vignettes

**Vignette 1**

A 77-year-old, right-handed, widowed woman of German descent was admitted to neurology for a left ischemic stroke. There was a history of hypertension, hypercholesterolemia, and borderline diabetes. She was living alone when found on the bathroom floor by her son. In the ER, she presented with aphasia, right hemiparesis, and increased spasticity in on the right. She was distressed, confused, and agitated. She insisted on keeping her belongings because "neighbors are stealing."

There had been no other psychiatric symptoms or documented cognitive symptoms prior to the stroke, although her son had noticed forgetfulness for names, tasks, and deadlines. Some food items were found rotting in her refrigerator when her son found her. She had soiled herself after the stroke but there was no prior report of incontinence. The differential diagnosis included post-stroke hemiparesis, delirium, and neurocognitive disorder.

On the medical unit, a urinary tract infection was diagnosed, blood pressure was elevated, and blood sugar was high; these findings gradually improved. After a few days, the patient's mood seemed calmer. She was happy to see her son but still unable to speak. Physical and speech therapists began working with her. The patient often became frustrated because of her unsteady gait. After a few weeks, she became withdrawn and refused to eat. She was seen crying silently.

She simply stared in response when staff asked if she wanted to die. A psychiatric consultation was obtained due to concerns for a depressive disorder, which affects 30% of post-stroke patients.

At the bedside psychiatric consultation, the patient had hemiagnosia. She was able to answer close-ended questions reliably, but had difficulty forming sentences. Her son facilitated an interview which revealed that she was born during World War II. Her father, a successful merchant, immigrated with family to America when she was 2 years old. Most of her extended family died in concentration camps. The patient's mother died when she was 9 years old in a car accident. The patient denied morbid thinking or former suicidal attempts. Her son worried that she had little motivation to socialize or participate in group activities. She did not smile, was irritable, and looked angry when people didn't understand her. However, she appeared to respond positively and attempted to reposition herself closer to the psychiatrist when she was told that the psychiatric team would continue to see her.

The occupational therapist helped the patient join the unit's art therapy group. It emerged that the patient used to work as a seamstress. She didn't have fine motor control of her dominant right hand, but she was able to hold a piece of fabric while learning to use left-handed scissors. She seemed to enjoy hearing the rhythmic sound of the fabric being cut. An old sewing machine was found, and she practiced pressing the pedal with her right foot, without sewing anything, looking at the needle going up and down. With the assistance of staff, she started to sew straight lines to combine pieces of fabric. She insisted on doing everything her left hand could do, even ironing the fabric under supervision or cutting the thread.

When the patient tried to speak in the group, German words came more easily to her. Her children decided to help her reminisce; her older daughter brought in an old photo album of black-and-white pictures from their life in Europe. The patient joined the ongoing reminiscence therapy and life review group. Even though she was unable to speak English fluently again, she showed meaningful photos which others asked about. One was a photo of a serene woman holding a cello in an orchestra, which the patient examined intently. A male patient commented on how beautiful the woman in the photo was and remarked that the patient looked like her. The patient whispered "Mutti" (German for "mommy") and started crying. She kept repeating the word.

A German-speaking visiting medical student agreed to provide translation for a course of short-term interpersonal therapy. After 2 weeks of interpersonal therapy at three sessions per week, the patient was less anhedonic and more engaged in her autobiographical (reminiscence) therapy group. She started regaining her appetite, and she requested foods from childhood, such as sauerkraut. Her sleep improved. She participated more actively in the art therapy group and created a mixed media tribute to her deceased mother, with a collage of pictures and fabrics. Later, the patient did another collage for the unit which included a tribute to victims of many other catastrophes: a tree with pieces of fabric and glued copies of black-and-white pictures, including those of her relatives. She wrote an epitaph to them on a board with her right hand in German, using a big marker.

The patient's physical therapy progressed to the use of a walker and then a cane. She kept busy with art activities and groups while she was transitioning to assisted living for semi-autonomous people, located near her three children.

**Discussion**

Effective antidepressant treatment can involve "a combination of antidepressant medication and active behavior that includes search activity and different types of psychotherapy oriented toward the restoration of the right hemisphere functions: interpersonal deep psychotherapy (Schore 2003; Brody et al. 2001), induction of altered states of consciousness, and art therapy. The most modern methods in the treatment of depression help patients use their left hemispheric skills in order to partly compensate for the core and fundamental distortion – the deficiency of right hemispheric skills and an inability to feel themselves integrated in the poly-dimensional world through the creation of a poly-semantic context" (Hecht 2010). In Vignette 1, the patient's left hemispheric stroke had further impacted left brain functions and exacerbated underlying depressive tendencies. Both psychotherapeutic modalities utilized in the vignette (interpersonal therapy (IPT) and art therapy) have demonstrated efficacy for the improvement of brain functional asymmetry in depression. Since the patient in Vignette 1 had verbal abilities affected by the stroke, with possibly an underlying mild cognitive impairment prior to the stroke, cognitive therapy was not an appropriate modality. However, behavioral activation, using reminders from staff, and an aid at home after discharge were provided as modalities which can enhance brain health.

**Vignette 2**

A 71-year-old man with a history of bipolar disorder was admitted to the acute psychiatric unit with depression and a plan to overdose on Tylenol. His medical history included

uncontrolled hypertension, resulting in chronic kidney disease stage 3. His bipolar disorder had been well-controlled for years on lithium, but in discussion with his psychiatrist and nephrologist, he slowly tapered off lithium 4 months prior to admission. The patient presented to the clinic after his son found him sitting in a messy apartment, not having showered for days, and without food. On admission, he was disheveled and unshaven, wearing clothing that was too loose and showing psychomotor retardation and blunted affect. He had linear, but impoverished, thought process and voiced themes of worthlessness and being better off dead. There were no psychotic symptoms. He scored 30/30 on the Montreal Cognitive Assessment (MoCA). His past failed trials of divalproex, lamotrigine, carbamazepine, and quetiapine, and the declining renal function, led to an inpatient treatment regimen of aripiprazole 5 mg in the morning.

The patient gradually began to show improvement. A few days into the hospitalization, the patient began participation in the unit's Grief and Loss group and talked about lingering symptoms of grief related to the loss of his wife 10 years prior, accompanied by social isolation after retirement from his career as a civil engineer. But cognitive distortions, including "black-and-white thinking" and catastrophizing about the future, were noted. The psychiatrist provided psychoeducation about how cognitive patterns can become maladaptive in depression and briefly guided the patient through the "evidence for and against" his beliefs. CBT self-help materials were provided, including thought records and activity planning worksheets. Over their next few meetings, the psychiatrist reviewed the patient's progress in the readings and helped him sketch out an activity plan for the week following discharge. The group therapist reinforced these efforts with the patient during Discharge Planning and Coping Skills groups. By the time of discharge, the patient's depressive symptoms had significantly improved and he was no longer suicidal. He expressed optimism and a plan to reduce his isolation at home through volunteer activities and spending more time with his son.

**Discussion**

In cognitively intact older adults with depression, brief CBT interventions can be effective. The insights gained by other treatment team members (social workers, nurses, group therapists) can help to guide the therapeutic approach when there is not enough time for lengthy interviews. In this case vignette, "homework assignments" during his inpatient stay involved the patient actively and gave a sense of agency in his own recovery. Other team members provided assistance with these brief assignments; a discussion of these approaches was fruitful in group sessions, which helped diminish the patient's sense of isolation.

### 18.2.1 Cognitive Behavioral Therapy, Behavioral Activation, and Cognitive Stimulation (See Vignette 2)

In a 2014 meta-analysis, Cuijupers et al. reviewed 44 studies comparing psychotherapies to control groups, including other therapies and pharmacotherapies. They found that CBT is an effective psychotherapeutic modality in geriatrics. CBT, along with PST and life review therapy, were found to be more effective than the other psychotherapies studied [15]. A 2017 Hummel et al. study examined an early intervention CBT program for depressed geriatric patients who were medically hospitalized with acute systemic illnesses. Participants were limited to those with normal cognitive function or mild cognitive impairment; and all patients eligible for the study could partake in three group psychotherapy sessions during their inpatient stays [10]. Once discharged, patients were randomized to a psychotherapy treatment group or a control group (waiting list with usual care) [10]. Those participants in the therapy group continued to participate in weekly group psychotherapy sessions at the hospital's day clinic [10]. A manualized CBT program was used, with 15 90-minute sessions that were standardized for older adults living at home; sessions were facilitated by experienced psychotherapists who were qualified in geriatric therapy [10]. The psychotherapy group showed

significantly decreased depression scores compared to the control group and also had improvements in secondary outcome measures that examined physical, psychological, cognitive, and functional parameters [10]. Additionally, caregiver burden was decreased for the psychotherapy group [10]. This study demonstrated that CBT can be modified for use in group settings in acute general medical hospitalizations and could serve as a bridge for continued care/treatment upon discharge.

Levin et al. suggest that cognitive therapy (CT) can be integrated into acute general medical settings via psychosomatic medicine consultation [16]. The traditional approach to CT is necessarily modified by the acute inpatient environment, which is often short on time. While an assessment/data-gathering phase in outpatient settings results in a case formulation which precedes psychotherapy, in acute general medical settings, data gathering must be combined with CT interventions [16]. In the initial psychosomatic medicine consultant interview, once a physician has enough information for a preliminary formulation, they should employ appropriate cognitive or behavioral techniques [16].

Behavioral activation (BA) is a therapeutic approach that focuses on maintaining patient involvement in life activities (as opposed to withdrawing and becoming more less active) and helping patients connect the impact of meaningful activities on their mood [17]. Snarski et al. studied the use of BA in an inpatient geriatric psychiatric facility with participants who had a mean age of 72. The participants' diagnoses included schizophrenia, bipolar disorder, major neurocognitive disorder (MNCD) (dementia), schizoaffective disorder, psychotic disorder, and major depressive disorder [17]. The average MMSE (Mini-Mental State Examination) score of the group was 24.80 (cut-off score for inclusion was 18 or above) [17]. Eight 30-minute sessions were conducted over 4 weeks. The study found that participants in the BA group had improved GDS (Geriatric Depression Scale) scores, compared to participants in a treatment-as-usual group [17]. The authors suggested that BA may more useful for geriatric patients with cognitive impairment, than therapies such as CBT [17].

A 2016 study compared CBT to behavioral activation (BA) in terms of clinical effectiveness and cost-effectiveness [18]. Richards et al. recruited 440 participants and randomly assigned them to either BA or CBT groups [18]. Mental health workers were trained in BA and provided 60-minute sessions to the BA group participants; psychotherapists of various disciplines accredited in CBT conducted the CBT sessions [18]. The authors found that BA was more cost-effective than CBT and was not inferior to CBT in terms of improvement of depression [18]. Though this study was conducted in participants with a mean age of 43.5 years and conducted in an outpatient setting, it could still inform approaches to treating older adults in inpatient settings. Training staff of inpatient psychiatric units to conduct a simpler type of therapy is perhaps a more feasible way of improving access to psychotherapy in the acute psychiatric or medical hospital.

Cognitive stimulation has been shown to be effective in reducing symptoms of major NCD, in both individuals living in the community and in long-term care homes [2]. Van Zon et al. examined the use of cognitive stimulation administered by volunteers to residents of long-term care homes [2]. Volunteers were solicited from people already volunteering at the care homes and provided with 2 hours of training in how to structure their 20-minute sessions with each resident and how to administer exercises in reasoning, attention, and memory [2]. The volunteers met with the residents three times a week for 8 weeks [2]. The study found significant improvements in immediate memory (verbal, nonverbal, and learning) and verbal fluency, including in those older adults who carried a diagnosis of major NCD [2].

### 18.2.2 Acceptance and Commitment Therapy

Acceptance and commitment therapy (ACT) is a contextual behavioral science approach [19]. In this theory, psychopathology is caused by

"cognitive fusion" or the domination of verbal and cognitive processes over emotions, thoughts, memories, and bodily sensations [19]. According to ACT theory, people interpret their thoughts literally and stay in a problem-solving mind-frame, which leads to "experiential avoidance" [19]. As a result, their behavior is inflexible and ineffectual, leading to unhelpful behavioral patterns (impulsivity, inaction, avoidance, excessive social compliance) [19]. The sum of these patterns is termed "psychological inflexibility," which ACT theory posits as the core of most human suffering [19]. The goal of ACT is to increase psychological flexibility and change behavior so that it ultimately serves an individuals' personal/chosen values [19]. Figure 18.2 summarizes the main principles of ACT.

ACT has six core processes [20]. "Acceptance" is an active and conscious acceptance of inner experiences (thoughts, feelings, sensations) without accompanying effort to change or counter them [20]. "Cognitive defusion" refers to techniques that decrease the believability of thoughts/feelings/sensations experienced by a person [20]. "Being present" is the non-judgmental and direct experience of physiological (e.g., physical pain), psychological (e.g., sadness), social (e.g., having a conversation), and environmental (e.g., rain) events [20]. "Self as context" describes a person's awareness of their own internal and external experiences, which is often facilitated by mindfulness exercises [20]. "Values" refers to the qualities of chosen, purposeful action and "Committed action" refers to concrete goals achieved by effective action linked to a person's chosen values [20].

Gaudiano et al. utilized a modified ACT protocol for the individual treatment of psychiatric inpatients with psychotic symptoms in acute inpatient settings [21]. Each patient received an average of three ACT sessions, which were designed to be "stand-alone" sessions; the sessions began with an educational component focused on psychotic symptoms, followed by presentation of the ACT model [21]. Mindfulness and acceptance exercises were taught and practiced, and behavioral goals were discussed and explored within the framework of thoughts/emotions as potential barriers to goal attainment [21]. The sessions ended with a review and suggestions of exercises to practice prior to the next session [21]. This approach could be modified for use in a group format for inpatient psychiatric settings, or modules could be adapted for short-term individual interventions in medical settings. The modules could also be manualized, increasing usability for staff not formally trained in psychotherapeutic techniques.


**Fig. 18.2** Main principles of ACT

In their study, Davison et al. found support for a 12-session (individual therapy) ACT-based intervention in reducing depressive symptoms in long-term care residents, which remained at lower levels at a 3-month follow-up [22]. While the study did not focus on acute inpatient settings, it does demonstrate the applicability and efficacy of the ACT model for older adults.

In their 2016 study, Villatte et al. divided acceptance and commitment therapy into two modules (ACT OPEN and ACT ENGAGED), which each had eight treatment sessions [23]. Participants were included not based on diagnostic criteria, but instead on clinically significant psychological distress; diagnostic interviews completed after participant selection revealed a mix of depressive and anxiety disorders [23].

ACT OPEN procedures focused on acceptance and cognitive diffusion processes to increase psychological flexibility and decrease detrimental reactions to feelings and thoughts [23]. ACT ENGAGED procedures focused on values and "committed action processes" in order to increase motivation and reinforce meaningful behaviors [23]. Both modules facilitated flexible self-awareness, as well as action based on awareness and intention [23]. The ACT OPEN module resulted in more improvement after each session, and more of a decrease in symptom severity, when

compared to ACT ENGAGED [23]. The ACT ENGAGED module resulted in better quality of life improvements when compared to ACT OPEN [23]. This modularized approach allows clinicians a choice between a process focused more on increasing self-awareness of reactions to thoughts/behaviors and a more motivation/action-oriented approach. Clinicians could choose the module better suited for their patients, both in terms of personality and physical capability to be more active or engage in behavioral change.

### 18.2.3 Interpersonal Therapy (See Vignette 1)

IPT is a short-term (12–16 sessions), manual-based treatment that was developed for treating depression in the early 1980s [24]. It incorporates elements of psychodynamic-oriented therapies (exploration, clarification of affect) and CBT (behavior change techniques, reality testing of perceptions) that are used to address four areas of conflict: unresolved grief, role transitions, interpersonal role disputes, and interpersonal deficits. These four areas, especially grief and role transitions (e.g., retirement), represent realities with which older populations are inevitably, sooner or later, confronted. IPT is a psychotherapy that is suitable for primary care and inpatient settings, and its basic principles can be taught to a variety of clinicians.

Within this approach, considerable effort is spent educating patients about the biopsychosocial model of depression (or other psychiatric illnesses, as indicated). Interpersonal relationships are seen as the stage upon which depression and/or other forms of distress are expressed. All of the patient's important relationships are systematically explored with regard to the degree of attachment they contain for the patient that may indicate a causal factor in the development of the depressive episode (e.g., role dispute). This short-term treatment makes no attempt to alter personality, but rather focuses on current problems. The therapist is a benevolent facilitator without inviting a deepened transferential relationship. Focusing on the here and now facilitates problem-solving as well (see below). The conversational style inviting the patient to tell his/her story is comfortable and helpful. Depending on the hospitalization length of stay and the patient's degree of engagement, it might be possible to implement such a therapy and complete the course by planning for three sessions per week, for instance.

Family members often misattribute problem behaviors to volitional acts of defiance, when they actually are features of executive dysfunction, a salient aspect of cognitive impairment. Fortunately, the therapy modality can be adjusted for these patients (IPT-ci) and the approach includes (1) remind the patient of abilities that remain intact that could be further developed to help to compensate for the lost abilities and (2) help the patient to foster new attachments, commensurate with his/her current abilities, and, when necessary, help the patient accept increased dependency on others. Furthermore, it is important to adapt the interventions, especially since deficits in executive functions are associated with a poor and unstable response to antidepressant medications [25].

In one study, IPT was found to be more effective in moderate to severe depression [26]. Mackin and Areán, 2005 [25], systematically reviewed the evidence base for psychotherapy as an empirically supported treatment of late-life depression. The review also found good support for the combination of medication and IPT to prevent relapse and recurrence of major depression in older adults, especially those who have recurrent major depression. Aging patients responded as well, albeit more slowly, than middle-aged patients. IPT may be most effective as a maintenance treatment when combined with an antidepressant medication for more severely depressed older adults [27].

### 18.2.4 Social Problem-Solving Therapy

Interventions in inpatient settings are usually time-limited in an unpredictable fashion, which can make the determination of a specific therapy timeline challenging. However, some approaches

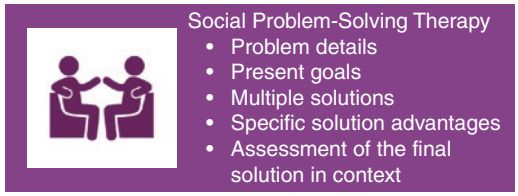


**Fig. 18.3** Summary of issues addressed in social problem-solving therapy

can at least be initiated, with the recommendation of following up with a psychotherapist after discharge. Other approaches can be used in the inpatient setting in the form of tools. Social problem-solving therapy (SPST) is a good example of such an approach. Ineffective coping under stress (due to insufficient coping reserve compared to the number or severity of stressors) is hypothesized to lead to distress in the form of anxiety, depression, and even psychotic decompensation. Figure 18.3 provides a summary of issues addressed in SPST.

Such a step-by-step, practical approach presents significant advantages, especially for patients with cognitive decline or predominantly concrete thinking. Social problem-solving therapy has been shown to be associated with significantly greater improvements in depressive symptoms compared with reminiscence therapy or the waiting list [27].

### 18.2.5 Reminiscence Therapy and Life Review (See Vignette 1)

According to Socrates, the only life worth living is the examined life. Reminiscence and life review therapy, as their names indicate, consist of (1) remembering specific life events and (2) looking back at one's life trajectory. These approaches are derived from Eriksonian developmental theory and were specifically developed for older adults. Both techniques can lead to re-experiencing of personal memories and significant life experiences and to the identification or remembering of personal values and self-identity. Both approaches are totally patient-centered, as each person knows best about her/his own life.

Reminiscence therapy uses the recall of past events, feelings, and thoughts to facilitate pleasure, better quality of life, and better adjustment. It is valuable and very accessible in inpatient settings because it can be conducted during daily activities such as mealtime or walking around a facility. There does not seem to be reported adverse events to reminiscence therapy, and it can alleviate feelings of loneliness, anxiety, and depression [28]. Studies show that reminiscence therapy has a positive effect on older adults' psychological and subjective well-being. Self-esteem, satisfaction, and meaning are all measures that were improved by such interventions, while anxiety and depressive symptoms decreased [29]. They could even prevent depression in late life [29]. The positive effects persisted when measured at 1 and 3 years post-therapy [30]. Areán and Cook [27] say that reminiscence psychotherapy may be useful for treating depression in confused or older adults with early major NCD living in residential facilities.

Life review therapy is an advanced type of reminiscence, exploring problems through narration (verbal, written, or other). The life story is an internalized and evolving myth of the self, which provides unity and purpose in the individual's life [29]. It helps create a sense of internal coherence, which is healing especially when traumatic experiences have created a rupture in the person's life story. It is an especially relevant process for older adults as they face their last opportunity to sum up their life and its meaning, and hospitalization (whether for physical conditions or psychiatric decompensation) can act as a catalyst because of the sense of urgency older patients may feel regarding unresolved issues when they are acutely ill. Erikson emphasized that studying one's life story enhances an individual's sense of integrity, gratitude, and acceptance. In life review, individuals are encouraged to acknowledge past conflicts and to consider their meaning in their life as a whole. It is more structured and focused on both positive and negative life events. The life story reflects what a person leaves behind and how he/she wants to be remembered. Reviewing and writing one's life story appears to be therapeutic [31]. Authors of memoirs also mention the

significant advantage of keeping their linguistic skills alive. Additionally, in a group of patients with neurocognitive disorder (Alzheimer disease or other neurocognitive disorders), it was found that a cognitive rehabilitation model (using strategies such as remembering names) produced significant improvements on goal performance and satisfaction [11].

Life review therapy uses the normal reminiscing of aging to deepen the person's self-knowledge often with exercises such as photo scrapbook review, memoir writing, and pilgrimages to childhood sites [29]. For instance, one method to facilitate the emergence of positive memories is the use of narration and creative writing, stimulated by a specific prompt such as "tell us about your favorite teacher" or "describe a joyful family vacation."

Reminiscence psychotherapy is about focusing more on positive memories in group settings to improve self-esteem and social cohesiveness; people choose to tell the stories that help them present themselves [29]. In addition, involving others in our life stories as we review them allows for new perspectives. Inpatient settings can provide the team with a reasonable sample of potential participants. Therefore, reminiscence and life review therapy should be encouraged.

### 18.2.6 Group Psychotherapy

A distinct advantage of inpatient settings is the presence of various staff at all times who can co-facilitate group sessions. It is more efficient to do psychoeducation and discuss general lifestyle principles to a group rather than one-on-one.

Certain group interventions, particularly CBT, appear promising for use with depressed older adults. It is a great format to counteract certain negative experiences stemming from loneliness and grief. It helps build a sense of solidarity and gives an opportunity for practicing interacting with others in the case of patients who are about to be discharged to transitional living or a nursing facility. It may offer significant advantages to older people: it is less expensive than individual treatment and the social network provided by group therapy presents potentially superior therapeutic benefits for a cohort dealing with various losses. ACT has also been modified to include group formats. The addition of group therapy to individual sessions dramatically expands the contexts in which processes (e.g., mentalizing) can take place [32]. Certain forms of art therapy are also more stimulating in groups.

### 18.2.7 Art, Music, and Exercise

Modalities which engage the senses should be encouraged; for instance, the graphonomic process of Chinese calligraphy integrates mind and body. Hearing or playing a musical piece that lifts one's mood is a universal experience. Crafts, painting, and pottery can also procure the satisfaction of producing and restore self-esteem. Body-based therapies, e.g., yoga, tai chi, and mind-body techniques, can increase mindfulness and physical fitness, thereby improving health outcomes. They can also be used with patients with more severe symptoms like psychosis (see Introduction section). Figure 18.4 provides a summary of cost-effective modalities to engage geriatric inpatients.

Expressive art also intersects with life review modalities described above; e.g., creative writing presents the advantages of changing the narrative of a difficult life by allowing transformation and at the same time providing a product the patient can be proud of, a legacy for future generations. Painting can serve a similar function by using visual arts and symbolism, which is especially

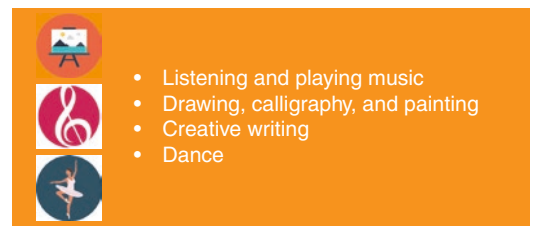


**Fig. 18.4** Cost-effective modalities to engage geriatric inpatients

useful when some traumatic memories cannot be easily processed verbally. Esthetics is also part of the healing environment. Studies have shown that exposure to nature can improve health outcomes. When nature is not directly accessible, artwork can be displayed in care facilities. Realistic images are preferable to ambiguous artworks, which bear the potential for negative interpretations, especially in stressful environments like hospitals [33].

These modalities listed above are easily accessible and require inexpensive materials. In every inpatient unit, even in this digital era, it is easy to find a piece of paper and a pen. Handwriting and drawing are complex human activities that entail an intricate blend of cognitive, kinesthetic, and perceptual-motor features. The act of writing itself engages motor circuits and coordination, which can facilitate retention, hence an additional advantage for people suffering from memory decline. The meaningful coupling between action and perception during handwriting establishes sensory-motor memory traces. Intellectual leisure activities in later life, including calligraphy, may also delay cognitive deterioration.

A pilot study investigated the effects of calligraphy on cognitive function in older Hong Kong Chinese people with mild cognitive impairment, and it showed that calligraphy therapy can enhance spatial ability and sense of control [34]. There is some clinical evidence that Chinese calligraphic handwriting can help with behavioral change and emotional stability in patients with depression or cancer [35]. In a study by Kao et al., 8 weeks of Chinese calligraphic handwriting training had a significant attenuating effect on physiological parameters of arousal and its effectiveness compared favorably with that of meditation [35]. In summary, the act of calligraphic writing may train people's attention and concentration and result in relaxation and emotional stabilization. It can also improve the writer's cognitive activity [35, 36].

Different forms of artistic expression (e.g., dancing, drama, music) have positive effects on relaxation and emotional expressiveness [35]. Music has also been shown to help adults with major NCD. It is a universal language (through its symbolism and affect-laden qualities), which can stimulate non-language dominant structures, which generate the implicit self, the structural system of the human unconscious [37]. Direct access to these implicit processes by both patient and therapist is central to effective treatment.

Art therapy might also facilitate some transgenerational connections to one's ancestors and optimize the life review or reminiscence approaches. Again, therapy in general and art therapy in particular solicit mostly the right hemisphere and could help access collective, intuitive, holistic knowledge. The ability to mentalize is correlated with an interest in art, maybe because high levels of mentalization are associated with a sense of internal freedom to explore thoughts, feelings, desires, and experiences [32].

If possible, incorporation of physical exercise may augment the benefits of psychotherapy. Jacquart et al. found that psychiatrically hospitalized older adults with depression who participated in an exercise plus psychotherapy intervention had significantly lower scores on the GDS (Geriatric Depression Scale) than those patients who received psychotherapy only. Participants in the experimental group walked in the facility for 30 minutes daily. During that 30-minute walk, each participant received 20 minutes of validation therapy (preceded by a 5-minute warm-up and followed by a 5-minute cool-down) [38].

A review article by Theleritis et al. revealed that simulated presence (a personalized audiotapes approach) improved withdrawn behavior 69% of the time; it increased the level of interest more than placebo and usual care [39]. The stimulated retreat model of care (interdisciplinary care, activity programming, and family support) increased external engagement. Mindfulness-based stress reduction might also be effective for apathy [39]. Table 18.1 summarizes many of the aforementioned psychotherapeutic interventions which can be helpful for geriatric inpatients.

Apathy is a symptom of particular concern in the geriatric inpatient, because participation in treatment and the social environment is essential to overall well-being. Non-pharmacological treatments for apathy are quite safe and

**Table 18.1** Psychotherapeutic interventions with potential benefit to geriatric psychiatry inpatients

| Psychotherapy modality | Adaptable to group settings | Available as modules or manualized | Suitable for patients with psychotic disorders | Suitable for patients with cognitive impairment | Requires a trained therapist | Can be taught by staff/ volunteers |
|---|---|---|---|---|---|---|
| Cognitive behavioral therapy | Potentially | Yes | Maybe | No | Yes | No |
| Behavioral activation | No | No | Yes | Yes | No | Yes |
| Cognitive simulation | No | Yes (worksheets) | Maybe | Yes | No | Yes |
| Acceptance and commitment therapy | No | Yes | Yes | No | Yes | No |
| Interpersonal therapy | No | Yes | No | Maybe | Yes | No |
| Social problem-solving therapy | Yes | Yes | Yes | Yes | Maybe | Maybe |
| Reminiscence therapy & life review | Yes | Yes | Yes | Yes | No | Yes |
| Group psychotherapy | Yes | Depending on modality | Maybe | Yes (mild impairment) | Yes | Maybe |
| Art & music and exercise | Yes | Depending on modality | Yes | Yes | No | Yes |

well-accepted. Per Cohen-Mansfield et al. (as quoted by Theleritis et al. [39], the person's attributes, environmental factors, and stimulus characteristics all contribute to the level and nature of engagement; therefore, the approach should be individualized. Caregivers may directly prompt patients to initiate activities, using visual cues to behaviors and setting up routines for daily activities. Education is a necessary element to assist families in understanding apathy and its mechanisms in major neurocognitive disorder (MNCD) since patients with MNCDs might be misperceived as lazy or oppositional [37]. Table 18.2 provides a summary of non-pharmacological interventions for apathy.

## 18.3 Summary

Psychotherapies and related interventions can benefit the geriatric psychiatry inpatient. Cognitive behavioral therapy (CBT) and acceptance and commitment therapy (ACT) have been studied in aging adults and have been associated with improvements in symptomatology, particularly depression. Due to time constraints on the inpatient unit, it may only be possible to give a patient a limited number of sessions of any modality, perhaps not enough for full therapeutic benefit. However, that experience can form a primer for entry into longer therapeutic experiences in other settings. Life review, for example, starts during the data-gathering process in the inpatient unit, which lays the foundation to more extensive reminiscence work at home or in an outpatient setting.

It is important to consider the patient's level of cognitive impairment in the choice of therapeutic modality. For those patients with cognitive impairment, more active and guided approaches; e.g., cognitive stimulation, behavioral activation, social problem-solving therapy, reminiscence therapy, life review, and art/music/exercise may be beneficial. Loss and role transition, nearly ubiquitous experiences for older adults, may be addressed through interpersonal psychotherapy. In settings with limited access to trained therapists, mental health workers, students, interns, or volunteers may be trained in the basics of the interventions and/or manualized techniques as described previously.

**Table 18.2** Psychotherapeutic interventions for apathy in geriatric inpatients

| Non-pharmacological interventions | Parameters of apathy that were improved |
|---|---|
| Stimulation retreat model of care | All 5 improved lack of interest and lack of initiative |
| Multisensory stimulation | |
| Kit-based activity intervention | |
| Live interactive music | |
| Brief emotional shaping | |
| Simulated presence | Improved withdrawn behavior |
| | Increased level of interest |
| Mindfulness-based stress reduction | Improved lack of interest |
| Recreational activities | Improved emotional blunting |
| Music, art therapy, psychomotor activity | Improved engagement |
| Reminiscence group treatment | In 1 group, it improved lack of interest and emotional blunting; in another study, it improved behavior, cognition subscales of AES (Apathy Evaluation Scale) |
| Progressive muscle relaxation | Improved interest, volition, and social relationships |

**Take-Away**

- Geriatric patients accept psychotherapeutic interventions.
- The inpatient unit can be an excellent setting in which to introduce the geriatric patient to psychotherapeutic interventions.
- CBT may be better suited for patients without cognitive impairments, whereas problem-solving therapy might be more accessible for patients with cognitive impairment.
- When cognitive deficits make CBT a less suitable option, reminiscence therapy and life review, which have been developed initially for older populations, are recommended. They can enhance cognitive stimulation by facilitating the access to biographical memories.
- Brief group mindfulness interventions are well-tolerated and often suitable for acutely hospitalized psychiatric patients, including those with acute psychosis.
- Staff interactions and psychotherapeutic interventions may be tailored to each patient's specific needs.

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