DANCE-BASED INTERVENTIONS

Dance therapy – Dance movement therapy
Psychomotor dance therapy
Dance movement psychotherapy

KEY POINTS

- To provide a physical, cognitive or psychological rehabilitation.
- These interventions involve physical, cognitive, psychological and social processes.
- Observed effects are improvements in balance, gait, cognition, quality of life and social interactions, and reduced risk of falls and behavioural and psychological symptoms.
- In group, individually or with family caregivers and/or friends.
- For all people with dementia who are physically able to dance or participate sitting down.

PRESENTATION

A. Definition

According to the Association of Dance Movement Psychotherapy (ADMP), the psychotherapeutic use of movement and dance enables people to engage creatively in processes intended to promote emotional, cognitive, physical and social integration, and spiritual aspects of self. This intervention is based on the principle that movement is a form of expression of a person's thoughts and feelings. By identifying, recognising and accompanying people's movements, the therapist encourages the development and integration of new adaptive movement patterns in relation with emotional experiences of people[1]. Some dance-based interventions refer to this definition.

B. Fundamentals

Dance therapy is part of the four major disciplines of art therapy (visual arts, music therapy, drama therapy and poetry therapy). Dance appeared as a therapy in 1942 in the USA[2]. Dance is a multimodal activity involving motor skills, cognitive, sensory and sensory-motor abilities as well as emotional and social skills[3]. A growing body of research shows that creative arts and physical exercise are capable of alleviating disability, restoring social connections and slowing down the progression of the disease[4].

THEORETICAL BACKGROUND

A. Processes involved [1 ; 5]

- Physical processes: motor skills, balance, gait, movement coordination, physical and sensorimotor integration.
- Cognitive processes: attention, spatial movement planning, synchronisation in space and time, learning motor skills or sequences, sensory stimulation, creativity.
- Psychological, symbolic and metaphoric processes: body-image, self-expression (verbal and non-verbal communication), self-awareness, creativity, meditation, relaxation, expression of conscious and unconscious emotions, access to unconscious and/or difficult feelings.
- Social processes: social interactions, social inclusion.

Cultural aspects must be taken into account for the choice of dance styles and music. Processes listed above are more or less triggered in response to the quality of relationships initiated between the therapist and participants.

B. Neurophysiological correlates

Studies showed that dance helps to reduce stress, increase levels of serotonin (a wellness hormone), and develop new neural connections, especially in areas involved in executive functions, long-term memory, and spatial recognition[6]. Functional imaging has been used to isolate areas of the brain that contribute to the learning and performance of dance: motor cortex (planning, control, and execution of voluntary movements), somatosensory cortex (motor control and visuo-motor coordination), basal ganglia (movement coordination) and cerebellum (integration and planning of motor actions)[6]. Dance stimulates inter-hemispheric exchanges[7], suggesting a better processing of information. Dance learning is associated with long-term plasticity in older adults[8-9]. Dance as a rehabilitative activity can foster cerebral plasticity of older people[10].

SCIENTIFIC EVALUATION

Dance as a psychosocial intervention for people with dementia has shown positive effects on balance, gait, risk of falling, physical activity, cognition, quality of life, social interactions, and behavioural and psychological symptoms[11-12]. However, current scientific knowledge does not support an evidence-based effect of dance, although there is empirical evidence in clinical literature and field observations. Further studies are needed to strengthen evidence of effectiveness of this type of intervention.

There are no studies to date on the cost-effectiveness of dance-based interventions.

IMPLEMENTATION AND PRACTICE ADVICE

A. Training and/or knowledge required to provide the intervention

Dance therapist or dance movement therapist or dance movement psychotherapist who has undergone a specific Masters level training program (2/3years).
Basics in psychomotricity and/or occupational therapy, as well as knowledge of neurodegenerative disorders. Knowledge of and clinical skills in the practice of Person Centred Care[13].

B. Practical and clinical advice

THERAPEUTIC INTENTION	RECREATIONAL INTENTION
Participants profile People with dementia or cognitive disorders.	Open to anyone.
Indications ■ Motor rehabilitation: walk, gait, balance, risks of fall. ■ Cognitive rehabilitation: memory, executive functions, motor praxis. ■ Psychological rehabilitation: social interaction, mood, quality of life, social withdrawal, anxiety, depression, agitation.	Convivial events, community dance, regular recreational activity, social events.
Contra-indications Medical advice not to exercise, fragile health status. Agitation or wandering may interfere with the sessions.	Idem.
Contributors Dance movement therapist, dance movement psychotherapist and additional care staff to assist the therapist.	Staff, families, friends.
Setting of intervention Quiet, relaxing, well-ventilated, and spacious room. Non-slip floor or ground. Refreshments and chairs at disposal.	Ballroom, community centre, day centre. Non-slip floor or ground. Refreshments and chairs at disposal.
Dosage Individual or group sessions of 8 to 10 participants. ■ Period: 12 weeks. ■ Frequency: at least twice a week. ■ Duration: 30-60 minutes session (average 40 minutes).	Not specified.
Session sequencing **1** Welcome; **2** Warm-up; **3** Development with exercises and free dancing; **4** Closure; **5** Cool down; **6** Participants feedbacks. The movement must remain free with no obligation of coordination. Supports can be used (balloons, scarves, feathers, bells ...).	Not specified. The movement must remain free with no obligation of coordination. Supports can be used (balloons, scarves, feathers, bells ...).
Observance / Attendance Check that the sessions are appropriate and allow each participant to dance safely.	Not specified.
Assessment Cognitive, psychomotor, balance, behavioural, quality of life, Laban Movement Analysis (LMA) or Kestenberg Movement Profile (KMP).	Quality of life, well-being, satisfaction.

FOR MORE INFORMATION

Association for Dance Movement Psychotherapy UK:
www.admp.org.uk

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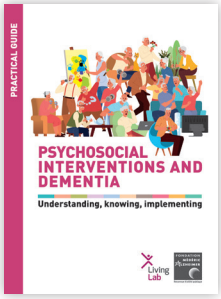

This sheet corresponds to a chapter of the guide ***Psychosocial interventions and dementia: understanding, knowing, implementing*** directed by the Fondation Médéric Alzheimer.

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