

# Management of behavioral and psychiatric symptom of dementia nursing essay



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In the United States, people over 65 years old are the largest growing segment of the population, and aging is the primary risk factor for dementia, a condition associated with aging that results in memory loss, unusual behavior, personality changes, and a decline in thinking abilities (Woods, 1999). Even modest advances in therapeutic strategies that lead to even small delays in progression of dementia can significantly reduce the global burden of the disease (Woods, 1999). Although cognitive deficits are the clinical hallmark of dementia, noncognitive symptoms are common and can dominate disease presentation. Behavioral and psychiatric symptoms of dementia (BPSD) remain among the most challenging problems faced by elders, their clinicians, and family caregivers, with prevalence ranging between 66% to 98% in the nursing home population (Testad, Aasland, & Aasland, 2007). These include an array of neuropsychiatric symptoms, such as agitation, aggression, delusions, hallucinations, repetitive vocalizations, and wandering, among other symptoms (Souder, Heithoff, O'Sullivan, Lancaster, & Beck, 1999). With progressive cognitive and functional decline in persons affected by dementia, management of these behavioral symptoms becomes a priority. It can be arduous, accounting for 30% of all dementia-related costs (Woods, 1999), and is associated with increased caregiver burden, stress, and depression, as well as increased health care costs and increased institutionalization of people with dementia (Testad, Aasland, & Aasland, 2007). There are a number of known pharmacological and non-pharmacological interventions but further research is necessitated to develop most effective and individually tailored plans for management of BPSD in persons with dementia.

Behavioral and psychiatric symptoms of dementia are driven by biological, psychological, psychosocial and environmental factors, and there is no single treatment that works for all patients or in all situations. A broad clinical assessment is essential before specific therapies are considered. It is essential to first perform a thorough history and physical examination to identify any medical illnesses that may contribute to the disruptive behavior (Cohen-Mansfield, 2000). There are currently no means for reversing the pathological processes of dementia, therefore therapy focuses on preservation of cognitive and functional ability, minimization of behavioral disturbances and maintenance of the quality of life for both the patient and care-givers (Allen-Burge, Stevens & Burgio, 1999). Current management of behavioral disturbances involves a number of pharmacological and non-pharmacological interventions. The decision to initiate a particular combination of therapies should be based on evaluation of benefits and risks associated with an individual patient.

A number of psychotropic drugs demonstrated efficacy in treatment of BPSD, such as cholinesterase inhibitors, antidepressants, sedatives and antipsychotics. Cholinesterase inhibitors provide modest improvement of symptoms and temporary stabilization of cognition in patients (Sink, Holden & Yaffe, 2005) antidepressants are effective in treating depression associated with dementia, while sedatives provide relief from mild anxiety in people with dementia. Antipsychotics have the best current evidence base for the treatment of BPSD and often used as the first-line pharmacological approach. Unfortunately they show only modest beneficial effect in the short-term treatment of aggression and limited benefits in longer term therapy

(Sink, Holden & Yaffe, 2005). In addition, they may lead to development of extrapyramidal symptoms, sedation, tardive dyskinesia, gait disturbances, and falls (Katzman, 2008). All of the psychotropic drugs have known adverse events in the elderly, and the decision to manage the symptoms with pharmacotherapy should balance harms against benefit, or minimized with nonpharmacological treatments.

An increasing number of nonpharmacological interventions are now available as an adjunct or alternative to pharmacotherapy for people with dementia. Their aim is to influence positively the emotional and behavioral changes associated with dementia (Graesel et al., 2003). These interventions are based on different theoretic frameworks of BPSD origin. Unmet needs interventions conceptualize problematic behaviors as a form of communicating an underlying need, such as the need for stimulation, pain reduction, and socialization (Douglas, James, & Ballard, 2004). Learning and behavioral interventions assume that BPSD are behaviors that have been inadvertently reinforced in the face of an environmental trigger (Douglas, James, & Ballard, 2004). Environmental vulnerability and reduced stress-threshold interventions, which assume a mismatch between the person's environment and their abilities to cope with the situation (Douglas, James, & Ballard, 2004). Even if the source of BPSD is biological, any of these nonpharmacological interventions may still be applied (Graesel et al., 2003). Numerous nonpharmacologic interventions can aid in alleviating behavioral symptoms and reduce caregiver burden and stress by providing dementia patients with meaningful activities. Combined with a thorough history, these

interventions and methodologies provide significant benefits to both the patient and the caregiver by reducing the burden of behavioral disturbances.

Increasingly more attention is being paid to alternative interventions that are associated with fewer risks than pharmacology. Aromatherapy appears to have several advantages over the pharmacological treatments. It has a positive image and its use aids interaction while providing a sensory experience. Aromatherapy has been investigated to reduce disturbing behavior, promote sleep and stimulate motivational behavior (Ballard et al., 2002; Holmes et al., 2002). It also seems to be well tolerated in comparison with psychotropic medication. The two main essential oils used in aromatherapy for dementia are extracted from lavender and melissa balm (Holmes et al., 2002). They also have the advantage that there are several routes of administration such as inhalation, bathing, massage and topical application in a cream. This means that the therapy can be targeted at individuals with different behaviors. There have been some positive results from recent controlled trials which have shown significant reductions in agitation, with excellent compliance and tolerance.

The largest placebo-controlled study (Ballard et al., 2002), in which 72 patients with severe dementia were treated with lemon balm essential oil, demonstrated improvements in behavioral symptoms comparable with those seen with psychotropic agents in patients with less severe dementia, but it also indicated secondary improvements in quality of life and activities. Half of the patients were randomly assigned to aromatherapy with lemon balm essential oil (n = 36) and half to placebo (sunflower oil). The active

treatment oil or placebo oil was combined with a base lotion and applied to <https://assignbuster.com/management-of-behavioral-and-psychiatric-symptom-of-dementia-nursing-essay/>

patients' faces and arms twice a day by care staff. Changes in clinically significant agitation (Cohen-Mansfield Agitation Inventory (CMAI) and quality of life indices (percentage of time spent socially withdrawn and percentage of time engaged in constructive activities, measured with Dementia Care Mapping) were compared between the two groups over a 4-week period of treatment. Sixty per cent of the active treatment group and 14% of the placebo-treated group experienced a 30% reduction in CMAI score, with an overall improvement in agitation (mean reduction in CMAI score) of 35% in patients receiving lemon balm essential oil and 11% in those treated with placebo. Quality of life indices also improved significantly more in people receiving essential balm oil. Importantly, at the end of the study no significant side-effects were observed.

## **Knowledge gap**

In this study, aromatherapy was used as an adjunct to existing psychotropic medication. Hence, although suggesting a place for aromatherapy as an adjunctive therapy, the study cannot be used as evidence that it is a viable alternative to sedative drugs in people with severe dementia.

In addition need to look at the pharmacologic effect as result of absorption versus the emotional effect that is dependent on perception of pleasant smell. It is known that severe dementia leads to asomnia, leading to decreased ability to appreciate meaningful smells. With or without conscious awareness, aromas can evoke mood changes and reduce stress responses.

Therefore, aromas may have positive influences on the behaviors of older persons who are in residential care, but the range of effects is largely

unknown. There is a possible psychological link between the fragrant odors  
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of aromatherapy oils and the individual's perception of whether a particular odor is pleasant or unpleasant; past experience with an odor will introduce inter-individual variability and consequently influence treatment outcomes. The efficacy of conventional medicines is required to be demonstrated in double-blind placebo controlled studies. Only then can any benefits over placebo be quantified and common side-effects systematically evaluated. A recent review concluded that while aromatherapy, amongst other non-pharmacological treatments, was identified as a potential treatment of behavioral problems in dementia, studies were often weakened by small sample sizes, lack of controls and imprecise measures.

### **The proposed study**

The aim of the proposed study is to test the effectiveness of topically applied lavender oil of proven purity as a treatment of behavioral symptoms in dementia. The hypothesis is that lavender oil will lead to a greater reduction in the frequency of behavioral symptoms of dementia than a placebo oil. A randomized-controlled trial (RTC) will be conducted to test the hypothesis with an appropriate control condition and blinding. The study will be conducted in long term care facilities specially for persons with dementia. Selected participants must therefore display at least one high frequency, physically agitated behavior that occurs daily at times other than during nursing interventions, and to a degree that requires staff intervention. Up to two target behaviors will be selected per participant in discussion with nursing staff based on frequency and severity using the Cohen Mansfield Agitation Inventory. Consented, willing participants will be assigned in random order to one block of lavender oil and one block of neutral control oil.

A nurse will massage lavender or control oil into the resident's forearms for one minute. Observations will commence 30 minutes pre-exposure and finish 60 minutes post treatment, giving a total observation period of 90 minutes per session. A discretely positioned, trained researcher will record if the selected physically agitated behavior is present or absent at one-minute intervals over the 90-minute observation period. The primary measure in this trial will be the change in mean counts of physically agitated behaviors before and after intervention phases. The 29-item Cohen-Mansfield Agitation Inventory completed by the researcher in discussion with nursing staff in closest contact with the resident at the end of each week, relating to behavior in the preceding week. The proposed study will help meet the need for better controlled trials of alternative treatments for agitated behaviors associated with dementia. The findings may guide family and professional carers in their selection of available evidence-based ways to reduce stressful behavioral symptoms that respond only partially to psychotropic medications.