

## LAVENDER AROMATHERAPY FOR IMPROVING SLEEP QUALITY IN MINNEAPOLIS VETERANS HOME RESIDENTS

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All participants and guardians (if applicable) signed informed consent to participate in the study and the study was approved by St. Catherine University IRB.

**BACKGROUND AND PURPOSE:** Throughout the lifespan, changes in sleep structure leave older adults with lighter, more fragmented, and less overall sleep. The consequences of long-term sleep deprivation can include fatigue, depression, immunosuppression, decreased mental function, and deterioration in functional status. Residents in the Minneapolis Veteran's Home (MVH) with poor sleep were found to be more prone to falls, more likely to sleep during the day, and less inclined to participate in group activities. To investigate interventions aimed at improving sleep in MVH residents, an interprofessional team of MVH staff and St. Catherine University staff and students was formed. The purpose of this study was to investigate the efficacy of lavender aromatherapy for improving sleep quality of MVH residents.

**METHODS AND MATERIALS:** To test effectiveness of lavender aromatherapy, a quasi-experimental pretest post-test design with four cycles of two weeks (Monday- Friday) and a total of 18 male veteran participants (mean age 77 + 9.8 years) was utilized. All participants completed the Richards-Campbell sleep questionnaire (RCSQ) on days 2 and 4 of baseline and intervention weeks, and two randomly selected participants from each cycle wore a wrist Actiwatch for the entirety of baseline and intervention weeks to assess subjective and objective sleep quality respectively.

**ANALYSES:** Descriptive statistics and paired t-tests were used to analyze the data.

**RESULTS:** Use of lavender aromatherapy resulted in an improvement in subjective sleep quality that approached significance ( $p = .056$ ).

**CONCLUSION:** Lavender aromatherapy is a practical and safe approach to support improved sleep in residents living at the MVH. Feasibility and cost-effectiveness promotes the likelihood of longer term facility wide changes. Further research should investigate the long-term effectiveness of lavender aromatherapy and utilize larger sample sizes.

**IMPLICATIONS:** Lavender aromatherapy is a simple, cost-effective intervention to improve sleep. With improved sleep quality, older adults may reduce falls risk, decrease daytime sleep, and increase participation in their communities leading to better quality of life.