A Quality Improvement Initiative for Non-Pharmacological Therapy in Dementia

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PROBLEM STATEMENT
Within the United States, approximately 5.7 million people are living with dementia. The combined direct and indirect costs is higher than stroke, diabetes heart disease, hypertension, lung disease, cancer, psychiatric illness and arthritis. Behavioral and psychological symptoms of dementia represents a group of non-cognitive symptoms and behaviors occurring in patients with dementia. According to Cerejeira (2015), it is estimated that BPSD affects up to 90% of all individuals with dementia over the course of their illness, and it is independently associated with:
- poor outcomes
- distress among patients and caregivers
- increased health care costs
- increased misuse of medication
- increased beds

PROJECT PURPOSE
This is a quality improvement initiative to:
- support agitation screening for dementia patients utilizing the Cohen-Mansfield Agitation Inventory tool (CMAI)
- increase the use of non-pharmacological therapy (NPT) in patients diagnosed with dementia

The Griffin study validates the CMAI observational screening tool as an appropriate and valid measure of agitation for dementia patients in a long-term care facility (LTCF). The aim is to decrease pharmacological interventions, increase psychosocial interventions in patient care and treatment plans to answer the question:
- Does the completion of CMAI screening tool for patients diagnosed with dementia living in a LTCF increase non-pharmacological therapy intervention and decrease agitation, polypharmacy and falls?

MODEL/NURSING THEORY
This project is an evidence based practice improvement with Plan-Do-Study Act approach developed upon Dr. Kristen M. Swanson’s middle range theory of caring that focuses on the importance of being mindful of the needs and well-being of participants. It is readily translatable for application to research and practice.

METHODS
This project utilized a pre-post design with data collected at baseline (Phase I) and post NPT on patients with dementia (Phase II). See Figure 1. The method of this quality improvement initiative was to perform and analyze two comparisons of the CMAI scores; pre-NPT intervention scores and post-NPT intervention scores. The post NPT CMAI score was the outcome measures to determine if there was a reduction in agitation. The preferred type of NPT was ordered and performed in daily 30 minute sessions for 14 days. Review of the patient’s medication administration record (MAR) pre-NPT and post NPT included record of high risk schedule, and prn (PRN) medication for final comparison and effect on poly-pharmacy. Number of falls 14 days pre NPT were recorded and number of falls 14 days post NPT were recorded for final comparison of falls.

RESULTS
Mean CMAI scores improved by 4.954 post NPT intervention, P<.000. Mean high risk med counts improved by .409 post NPT intervention, P=.000. Both the mean CMAI scores and the improvement in use of high-risk meds were statistically significant. Number of falls was not significantly improved post NPT intervention, P=.057.

DISCUSSION
Utilization of CMAI and implementation of NPT in the long-term care setting is a promising intervention to decrease agitation and decrease high-risk medications (benzodiazepines, anticholinergic, opioids and antipsychotics) in dementia patients. Opportunity exists to standardize the use of the CMAI in LTC to better identify agitation and offer NPT as an alternative in the patient’s plan of care.

Implications for Practice
Results suggest that through the emphasis of screening, and treatment reframing in a LTCF, early identification of BPSD utilizing the CMAI tool will increase the use of NPT options, and decreased use of high risk meds and falls for patients diagnosed with dementia.

Sustainability
Further research is needed to determine the best method of identifying BPSD to positively affect its trajectory as it relates to high risk meds and falls. Related declines, complications and outcomes associated with dementia are calling for practice model redesigns and delivery redesign.

REFERENCES

Utilization of CMAI and implementation of NPT in the long-term care setting is a promising intervention to decrease agitation and decrease high-risk medications in dementia patients.