Title of Project

Empowering Direct Care Providers in Breaking the Barriers to Alleviating Pain in Dementia

PI/Project Director

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Nursing Homes Involved

Long Island State Veterans Home
John J. Foley Skilled Nursing Facility

Description of Intervention

The project's primary objectives were to: 1) develop and validate a pain assessment tool for use in residents with dementia, and 2) demonstrate its usefulness in improving clinical outcomes.

In Phase I, the Observational Pain Assessment Tool for Dementia Residents was developed and piloted by certified nursing assistants, nurses, and other direct care providers. The instrument consisted of 41 response items divided into the domains of facial expression, behavior, mood, body language, and activity level. Direct care staff were trained on its use, and were instructed to use the tool twice daily (during the day/evening shift) for a period of six months.

In Phase II, direct care staff utilized a modified version of the Observational Pain Assessment Tool for Dementia Residents weekly (or when a resident appeared to be in pain) for a period of six months. A score ≥ 1 indicated the presence of pain, upon which the certified nursing assistant took clinical action or notified nursing/medical staff.

Research Design

Research Method – Single group design with repeated measures. Research questions sought to assess whether the use of the pain assessment tool would lead to improvements in the physical, functional, and behavioral health of residents with dementia by promoting early diagnosis/treatment of pain, and whether residents with Alzheimer's disease would respond differently to pain assessment/treatment than those with other forms of dementia.

Sample – 182 residents from Long Island State Veterans Home or John J. Foley Skilled Nursing Facility for whom a diagnosis of dementia was present in the medical record. Informed consent was provided by surrogate decision makers.

Measures – The investigators abstracted clinical data indicative of pain from resident charts at Phase I, which included past medical history of pain-related illness, diagnosis of arthritis, neuropathy, vascular insufficiency, cancer, pressure ulcer, fracture, or past use of pain analgesics/medications. Prior to and at the completion of Phase II, the investigators completed an MDS tool containing 26 elements related to resident function, quality of life, and other factors. Two versions of the intervention tool were used as previously described.

Analysis Approach – In addition to univariate statistics, the odds of items on the Phase I tool predicting the presence or absence of at least clinical indicator of pain were tested via longitudinal data analysis with general linear modeling. Items with a probability ≤.05 were retained. Phase II analysis of MDS elements utilized the McNemar test and the Bowker's test for symmetry, in order to assess change in resident outcomes corresponding with the intervention.

Results

In Phase I analyses of the pain assessment tool, 12 items were significantly associated with one or more clinical indicators of the presence/absence of pain. Several categories were combined to form nine response items on the revised instrument. In Phase II, the vast majority of resident function/quality of life indicators did not significantly change for persons with Alzheimer's disease or other dementias (further investigation was recommended). Of 612 evaluations initiated in response to an assessment indicating pain, the certified nursing assistant took sole action 76% of the time.

Contact Information

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