C5-23: A Study of Longitudinal Data Examining Concomitance of Pain and Cognition in an Elderly Long-Term Care Population

Author List:
Presenting Author: Allison H. Burfield
Additional Author: Mary Lou Sole

Presenting Author: Allison H Burfield
Address: 9201 Unversity City Blvd.
Charlotte, North Carolina 28223-0001
United States
Ph: 704 687 7966
Fax: 704 687 6071
Email: aburfiel@uncc.edu
Institution: University of North Carolina-Charlotte

Additional Author: Mary Lou Sole
Address: P.O. Box 162210
Orlando, Florida 32816-2210
United States
Ph: 407-823-5133
Fax:
Email: msole@mail.ucf.edu
Institution: University of Central Florida

Presentation Preference: Late Breaker poster submission

Abstract Categories:
Research Interest Groups (RIGs): Aging/Gerontology

Abstract:
Introduction: The aim of this research was to examine if a concomitant relationship exists between cognition and pain in an elderly population residing in long-term care. Prior research has found that cognitive load mediates interpretation of a stimulus. In the presence of decreased cognitive capacity, the relationship between cognition and increasing pain is unknown in the elderly. Chronic and acute onset of pain contributes to a significant decline in resident quality of life affecting the resident’s physical, mental, psychosocial, and spiritual well-being.

Method(s): A longitudinal cohort design was used. Data were collected from the Minimum Data Set-Resident Assessment Instrument (MDS-RAI) for 2001, 2002 and 2003 annual assessments of nursing home residents. Key cognitive, mood, behavioral, and health condition items were used to determine resident cognition and the existence of pain. A covariance model was used to evaluate the relationship between cognition and pain at three intervals.
Results: The sample included 56,494 subjects from nursing homes across the United States, with an average age of 83 years±8.2. ANOVAs indicated a significant effect (p<.01) for pain and cognition with protected t test revealing scores decreased significantly with these two measures. Relative stability was found for pain and cognition over time. Greater stability was found in the cognitive measure than the pain measure. Cross-legged effects observed between cognition and pain measure was not consistent. A concomitant relationship was not found between cognition and pain. Even though the relationship was significant at the 0.01 level, the correlations were low (r≤.08) indicating a weak association between cognition and pain.

Discussion & Conclusions: Considerable opportunity exists in conducting further research with the theoretical model used to include additional contextual and resident factors. Accurate measures of pain and cognition can give vital information into how to manage symptoms to influence health outcomes. Pain is a symptom that can be readily intervened upon to improve quality of life. Cognition is a valuable tool to determine the most appropriate method to assess pain, and thus improve the overall accuracy of detecting pain in the elderly residing in long-term care.

Abstract History:
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

Financial Disclosure:
No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

FDA Disclosure:
I will not be describing any pharmaceutical and/or medical device.

Non-Exclusive License:

Submitted by:
aburfiel@uncc.edu