Sigma Theta Tau International's 29th International Nursing Research Congress

Dementia Care: Long-Term Care Facilities' Environmental Design and Quality-of-Life of Older Adults

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Purpose: The current concept of long-term care (LTC) facility has shifted from a homogenous health care institution to that of person-centered care. Although this person-centered care concept is applied differently in Japan and the United States of America (USA), a common thread exists in that, as dementia progresses, older adults tend to find their quality of life (QOL) rooted in their environment (Abrahamson, Clark, Perkins, & Arling, 2012). Therefore, the environmental design of the physical facility is an important aspect of dementia care for older adults living in LTC facilities (Anderiesen, Scherder, Goossens, & Sonneveld, 2014). A homelike environmental design is shown to have a positive effect on the quality of life as well as the functionality of older with dementia (Hadjri, Rooney, & Faith, 2015; Chaudhury, Cooke, & Frazee, 2013). This is the first phase of a research study to examine the relationship between the environmental design in LTC facilities on daily activity patterns and quality of life of older adults with dementia living in LTC facilities. For this report, we assess the appropriateness of environmental scales for LTC facilities. We hypothesize that facilities scoring high in physical environment attributes would have a positive impact on the older adult residents' QOL.

Methods: Between January and May 2017, data was collected at one Assisted Living facility for older Japanese Americans in California, USA and a Group Care facility for older Japaneses in Chiba prefecture in Japan. A Group Care facility comprised of several Group Care units, each housed up to ten residents. We assessed the appropriateness of four environmental scales: Environmental Audit Tool-High Care [EAT-HC] (Fleming, Bennett, 2010); Professional Environmental Assessment Protocol [PEAP] (Weisman, Lawton, Sloane, Calkins, & Norris-Baker, 1996); and PEAP Japanese Version 3 [PEAP-J3] (Care and Kankyo Kenkyukai, 2005); Therapeutic Environment Screening Survey for Nursing Homes and Residential Care [TESS-NH/RC] (Sloane & Zimmerman, 2009). To assess QOL of older adults living in LTC facilities, we used the Dementia Care Mapping (DCM) and the Quality of Life-Alzheimer's Disease (QOL-AD) scales. Dementia Care Mapping (Dementia Care Mapping, 8th Edition) was conducted via observation by a certified user. QOL-AD was assessed subjectively and objectively by collecting data from both residents and LTC staff. We conducted individual interview with the residents (subjective) and administered the same questions to LTC staff (objective) in paper format. We then compared these two scores.

Results: Our findings indicated that TESS focuses more on the physical environment of LTC facilities (e.g., grab bar, lighting, flooring) while EAT is more appropriate to measure dementia care. Because there is no open space in group care unit (GCU) facility in Japan, we omitted all the EAT questions regarding outside areas (e.g., access to patio, outside activities, etc…). PEAP and PEAP-J3 quantify independence of individual resident. Approximately 10 - 15% of the total questions in PEAP and PEAP-J3 do not apply to Assisted Living (USA) and GCU (Japan) facilities. For example, the questions about access to cooking facilities or cleaning utilities are not applicable to residents in Assisted Living facilities (USA) and GCU (Japan) due to physical and mental limitations. In terms of physical functioning, residents in Assisted Living facility (USA) are able to move from room to room to attend different activities that keep them active and energetic. Because GCU (Japan) does not provide activities and residents spend most of their time in the living/dining room, GCU residents were noted to "withdraw (disengaged or sleeping)" 20% of the time. Higher Mood and Engagement (ME) values were reflected in Assisted Living facility (USA) through daily activity programs and socializing with volunteers. The space for socialization and extra

chairs for visitors are important to enhance residents' QOL. QOL-AD scores obtained from LTC residents in both USA and Japan were higher than the QOL-AD scores from the LTC staff.

Conclusion: There are similarities and differences in LTC physical design in the USA and Japan. In both countries, physical environment of LTC facilities has an impact on LTC residents' QOL. Our findings indicated that without a social area that is accessible for LTC residents, lack of social activity programs conducted either by volunteers or staff contributed to lowered residents' ME values. More studies are needed to determine effective design of the LTC physical environment in order to improve LTC residents' QOL.

Title:

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Keywords:

Environmental design, dementia care and quality of life

References:

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Abstract Summary:

This study examined the relationship between the environmental design in long-term care facilities in the United States and Japan and its effect on residents with dementia's daily activity patterns and quality of life.

Content Outline:

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I. Introduction

Current concept of person-centered care in long-term care facilities is applied differently in the United States and Japan. Environment design of LTC facilities is an important aspect of dementia care for LTC residents.

II. Body

A. Main Point #1: Appropriateness of environmental scales for LTC facilities Brief description of scales used to assess LTC physical environment include:

a) Environmental Audit Tool – High Care (EAT-HC)

b) Professional Environmental Assessment Protocol (PEAP)

c) Professional Environmental Assessment Protocol Japanese version 3 (PEAP-J3)

d) Therapeutic Environment Screening Survey for Nursing Homes and Residential Care (TESS-NH/RC)

B. Main Point #2: Assessment of quality of life of LTC residents using the following scales:

a) Dementia Care Mapping (DCM)

b) Quality of Life-Alzheimer's Disease (QOL-AD)

C. Main Point #3: Correlation of environmental scores and quality-of-life scores among LTC residents in the US and Japan.

a) Impact of high scoring LTC environment on quality of life

b) Suggestion for improvements in physical environment design to enhance quality of life

III. Conclusion

A. There are differences in LTC physical environment in the USA compared to Japan

B. High scoring on environmental scales of an LTC facility is correlated with higher quality of life scores for LTC residents and staff.

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