

Improving Delirium Care in Hospitalized Older Adults: Impact of Education on Hospital Aides (HAs) as Sitters

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PROBLEM/SIGNIFICANCE

- Delirium occurs in 29% 64% of hospitalized older adults with physiologic, economic, & psychosocial consequences.¹
- An estimated \$164 billion in health care costs results from complications of delirium such as:
 - ➤ Falls & functional decline
 - Prolonged hospitalization
 - ➤ Need for placement into long-term facilities²
- An interdisciplinary team (IDT) approach to delirium care is recommended for prompt detection of symptoms & accurate interventions.³
- Hospital Aides (HAs) who provide one-on-one observation & care of patients experiencing delirium as *Sitters*: ➤ Lack adequate training
 - ➤ Are underutilized in the IDT approach to delirium care⁴

PURPOSE/AIM

Purpose: To determine if an educational intervention provided to HAs who serve as *Sitters* for hospitalized older adults experiencing delirium enhances their:

- Knowledge regarding care for patients with delirium
- Skill in the detection of delirium symptoms
- > Level of confidence in the role of sitter
- Contribution to interdisciplinary team (IDT) care

Aim: To improve delirium care through effective utilization of appropriately trained HAs as members of the IDT.

BACKGROUND

- HA sitter usage has become a common practice in the management of delirium for older adults to prevent injury from agitation, falls, & as an alternative to physical restraints.5
- Observations in the acute care setting by the project investigator (a Geriatric Clinical Nurse Specialist [GCNS]) revealed HA Sitter inconsistency of evidence-based (EB) interventions for patients with delirium.
- HA Sitters expressed a lack of confidence and level of comfort in caring for patients with delirium to the GCNS project investigator in the acute care setting.
- HA Sitters expressed feeling inadequately prepared on what is needed to effectively and safely provide care for patients with delirium to the above GCNS
- Findings from others ⁶ align with the above GCNS observations & dialog.
- HAs may feel more empowered & motivated to apply their newly acquired knowledge about delirium as a contributing member of the healthcare team.

THEORETICAL FRAMEWORK

- Albert Bandura's Social Learning Theory (SLT) ⁷ was used to guide an educational intervention for HAs & pre/post measurements of knowledge (attention & retention), skill (reproduction) & attitude (motivation). SLT proposes four phases, mainly internal processes, that drive social learning:
 - 1) Attention: learner observation of a role model
 - 2) Retention: learning storage & retrieval of observation
 - 3) Reproduction: learner copies observed behavior
 - 4) *Motivation*: learner's internal drive to perform behavior

METHODS

Design: Longitudinal mixed methods Sample: Convenience sample of 17 HAs employed at a 250-bed acute care medical center in urban Honolulu

Procedures:

- Pre-assessment of HA knowledge of delirium
- 3-hour educational session on delirium delivered to HAs using SLT teaching-learning methods:
 - observation of role models
 - engagement in return demonstrations
 - partaking in simulated patient scenarios
- Post-assessment of HA knowledge of delirium (retention)
- Post-education visits by project investigator (GCNS) for bedside observation of HA's accuracy in the delivery of delirium care & detection of symptoms (reproduction)
- 10-minute HA interview (motivation)
- Quantitative measurements:
- Pre-post Knowledge of Delirium Test
- > The Sour Seven: Delirium Detection Questionnaire for Caregivers⁸
- > Hospital Aide as a Sitter Observational Rubric
- Qualitative exploration:
 - > Open-ended Interview Questions regarding HA's level of confidence & perception of their contributions to interdisciplinary care of the patient with delirium













RESULTS

Quantitative Results: Accuracy of delirium knowledge increased on all three post-intervention measures compared to pre-intervention HA delirium knowledge. This change was significant as reflected by Cochran's Q = 26.4 (3), p=.000.

Accuracy of HA Delirium Knowledge Across Three Measures

Measurement	Count (#) Accuracy of HA Delirium Knowledge		Mean Percent (SD) Accuracy of HA Delirium Knowledge	Significance (<i>p</i>)* Accuracy of HA Delirium Knowledge
	<u>Yes</u>	<u>No</u>		
Knowledge of Delirium Pre Test	3	14	18 (.393)	-
Knowledge of Delirium Post Test	10	7	59 (.507)	.016*
HA as Sitter Observational Rubric	17	0	100 (.000)	.000*
Sour Seven Delirium Detection Tool	14	3	82 (.393)	.003*

* Pairwise McNemar with Bonferroni adjusted alpha p = .016

Qualitative Results: Two major themes & four sub-themes emerged from the analysis of interview transcripts.

- Theme 1: Increased confidence. HAs expressed more confidence in their role as a sitter, with several expressing a large perceived increase in their confidence level.
 - Subtheme 1a: More comfortable. Being more comfortable, sometimes articulated as being less afraid of assisting with care for a patient with delirium, was associated with HA's increased confidence.
 - Subtheme 1b: Acquired knowledge. HAs expressed specific connections between the knowledge gained from the educational session & their increased confidence & level of comfort in caring for patients with delirium.
- Theme 2: Enhanced Relationship with the IDT HAs felt more included & associated with the IDT after attending the education session.
 - Subtheme 2a: Perceived value & importance HAs verbalized a clearer definition of their role within the IDT & how their contributions as a sitter are important.
 - Subtheme 2b: Observer & communicator to the IDT: HA's further articulated their relationship & value to the IDT by verbalizing specific contributions they could now make to the IDT in their role as a sitter for patients experiencing delirium

Limitations

- Small sample size N = 17
- Variable intervals of post education 1:1 visit
- Potential for Hawthorne effect

CONCLUSIONS

- The delivery of a HA educational session successfully enhanced knowledge, skill, level of confidence, & potential contribution of HA to the IDT care of older adults experiencing delirium in acute care settings.
- Findings align with others who study HAs in the Sitter role⁹
- SLT educational methods were effective:
- Attention phase: HAs observed & interacted with role models with geriatric expertise to learn about delirium
- Retention phase: HAs returned demonstration of knowledge in role-playing & accuracy on post-tests
- Reproduction phase: HAs replicated appropriate delirium interventions & detection of symptoms
- Motivational phase: HAs revealed increased confidence in the Sitter role & enhanced relationship with the IDT

IMPLICATIONS FOR PRACTICE

- Orientation curriculum for new HA employees to include content on delirium in older adults & the role of sitter.
- Recognition of the HA Sitter's value to quality care of older adults experiencing delirium will be encouraged by their inclusion in IDT care conferences.
- Continuing education to sustain delirium knowledge & skills of the HA is planned.
- Competency development or evaluation tool for HAs may be developed from the investigator-developed HA as a Sitter Observational Rubric.
- Additional educational development opportunities augmented by SLT with role modeling & role playing specifically targeted to unlicensed assistive personnel to be developed.

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REFERENCES

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References available as an addendum