Title: Using an Avatar Virtual Service Animal to Decrease Falls and Delirium in Hospitalized Older Adults

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References:


Abstract Summary:
This study examined the effect of an avatar virtual service animal on delirium and falls in hospitalized elders. Patients who used the avatar during their hospital stay had less delirium and falls than those who did not. Study findings support the use of this innovative technology for hospitalized older adults.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tr>
<td>The learner will describe the study methodology used.</td>
<td>Description of the avatar service animal. Inclusion criteria. Study methodology</td>
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<tr>
<td>The learner will discuss the impact of the avatar service animal on delirium and falls in hospitalized older adults.</td>
<td>Study outcomes: Delirium and falls. Qualitative results: Patient and family feedback; nursing staff feedback.</td>
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Abstract Text:
**Purpose:** The purpose of this pilot study was to examine the effect of an avatar virtual service animal on delirium and falls in hospitalized older adults. Other outcomes measured included cognition, loneliness, depression, and physical restraint use.

**Methods:** Approval was obtained from the Institutional Review Boards of both the medical center and the university. The study was conducted in a metropolitan teaching hospital, serving an ethnically diverse and underserved population. Inclusion criteria included being over age 65, having the ability to communicate in English, and able to give consent or have someone who can give consent. Participants on the two intervention units received the tablet based avatar for their entire hospital stay and a daily visit from an undergraduate or graduate nursing student. Participants on the control unit received a daily visit from a nursing student only. The avatar speaks to the client, displays a full range of emotions and responds directly to client questions and touch. The avatar is also able to play music and display photographs. Participants on the control unit received a daily visit from a nursing student only. Measures (MOCA, 3 Item UCLA loneliness scale, GDS, and CAM) were administered upon study enrollment and prior to discharge. A total of 100 older adults hospitalized on three medical surgical units were enrolled, 50 who received the intervention and 50 controls. All patients were over the age of 65 (mean 80, range 65-96), English speaking, and admitted for a medical diagnosis.

**Results:** There was a statistically significant difference in delirium (p<0.001) loneliness (p<0.001), and falls (p<0.001) between the intervention and control units. There were no significant differences in cognition, depression, or restraint use between the intervention and control units. Qualitative data demonstrated high patient, family, and nursing staff satisfaction with the avatar.

**Conclusion:** Study findings support the use of this innovative technology to enhance outcomes for hospitalized older adults.