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The Dementia Friendly Hospital Initiative Education Program for Acute Care Nurses and Staff

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Abstract

Individuals with Alzheimer's disease and other dementias have 3.2 million hospital stays annually, which is significantly more than older individuals without dementia. Hospitalized patients with dementia are at greater risk of delirium, falls, overwhelming functional decline that may extend the hospital stay, and prolonged and/ or complicated rehabilitation. These risks support the need for staff education on the special care needs of this vulnerable population. In this article we describe a full-day educational program, the Dementia Friendly Hospital Initiative, designed to teach staff how to provide the specialized care required by patients with dementia. Participants (N=355) from five different hospitals, including 221 nurses, completed a pre-test/ post-test evaluation for the program. Changes in participants' attitudes/ practices, confidence, and knowledge were evaluated. Scores indicated significant improvement on the post-test. The evaluation provides further evidence for recommending dissemination of the DFHI program.

Keywords

Dementia; Alzheimer's disease; nursing education; continuing education; hospitalization

Background/ Introduction

Currently, there are an estimated 5.2 million Americans with Alzheimer's disease (AD), which is the sixth leading cause of death in the United States (Alzheimer's Association, 2014). The mortality rate from AD continues to steadily climb while deaths from many other major diseases, including stroke, heart disease, cancer and diabetes have decreased (Tejada-

Vera, 2013). Furthermore, individuals with AD are more likely to be hospitalized than those without dementia and they are more likely to experience a longer length of stay (Fong, Jones, Marcantonio, Tommet, Gross, Habtemariam, et al., 2012).

Care of individuals with AD, the most common type of dementia, is costly. An Alzheimer's Association news report referred to AD as "the country's most expensive condition" (Alzheimer's News, 06/14/2013). The 2014 healthcare costs, including long-term care and hospice costs, are expected to be \$214 billion of which 70% (\$150 billion) will be paid by Medicare and Medicaid (Alzheimer's Association, 2014).

In addition to the financial toll, hospitalization poses other costs and risks for individuals with dementia. One particularly worrisome risk is delirium. Fick, Steis, Waller, and Inouye (2013) found that 32% of hospitalized patients with dementia experienced delirium and they were more likely to die, experience longer hospital stays, and experience greater functional decline than those without delirium. Delirium is a common complication in hospitalized older adults, leading to further cognitive decline, increased 30 to 90 day readmissions, morbidity, mortality, placement in long term care facilities, and falls (Fong, et al., 2012). Furthermore, delirium may take longer to resolve than the medical illness that precipitated hospital admission.

Because of the particular risk profile of patients with dementia, their care can be costly to hospitals, too. As of October 2008, the Centers for Medicare and Medicaid Services (CMS, 2012) no longer reimburses hospitals for costs associated with certain complications that occur during a patient's stay including urinary tract infections related to indwelling urinary catheters, Stage III and IV pressure ulcers, and injuries from falls. Since individuals with dementia are at increased risk of developing these conditions while hospitalized, there is added impetus for hospital administrators, nurses and other healthcare workers to better understand the unique needs of this population and methods to avoid iatrogenesis.

For these reasons as well as growing numbers of older adults with dementia being cared for in the hospital, there is an increased need for health professionals in this setting to understand the special care needs of patients with dementia (National Plan, 2013). This need has been recognized on a national level. The 2011 National Alzheimer's Project Act (2011) called for the improvement of "early diagnosis and coordination of care and treatment of Alzheimer's disease" and "improvement of outcomes for ethnic and racial minority populations that are at higher risk for Alzheimer's disease" (National Plan, 2013, p. 3). The Act also recognized that the education of nurses, other healthcare providers and staff in the treatment and care of individuals with dementia as one way of better serving these populations.

The DFHI Program

In this article, we describe a full-day continuing nursing education program designed to address this problem, the Dementia Friendly Hospital Initiative (DFHI). As described by Galvin, Kuntemeier, Al-Hammadi, Germino, Murphy-White, and McGillick (2010), this program was initially developed in 2006 as a pilot program based on input from focus groups of hospital staff. The program was first pilot tested with 143 hospital workers (Phase

1), then refined based on this experience and input from a national advisory panel of experts in the care of patients with Alzheimer's disease, including nurses, physicians, and social workers. The refined program was then pilot tested with an additional 397 participants (Phase 2) and shown to improve knowledge and attitudes/practices and confidence of participants towards patients with dementia (Galvin et al., 2010). In this paper, we report the evaluation of further dissemination of the DFHI program (Phase 3) to 355 participants at five hospitals to determine its readiness for broader distribution as an evidence-based continuing education program.

For Phase 3, several important modifications were made to the mostly didactic program. For example, duplication within and between the various modules was removed and more videos and active learning strategies were added. Nurses Improving Care for Healthsystem Elders (NICHE) videotapes and a *Fact and Figures* video from the National Alzheimer's Association were incorporated into the course content to show interactions with patients and to break up the didactic presentations. Also, case studies were added to the program to engage learners. The case studies were developed by Alzheimer's Association staff from their experience working with individuals with dementia and caregivers and reported experiences of hospitalization. Interdisciplinary teams of participants collaborated to assimilate or utilize information from the presentations as they discussed the case studies. Another exercise, *50 Ways to be Dementia Friendly*, was added because early participants voiced the need for administrators to participate in the program. In this exercise, participants identified concrete information from the program that could be applied to their work setting and created a "wish list" of suggestions to share with hospital administrators. Finally, a *Call to Action* was incorporated into the curriculum whereby participants were asked to commit to improving care for individuals with dementia. By signing the *Call to Action*, participants pledged to expand the DFHI within their hospital, share or post learning materials and/ or try to implement one of the suggestions from the course.

The all-day DFHI program consists of 5 modules of didactic content, slides, the aforementioned videos, learning activities, and handouts. A staff member of the Alzheimer's Association or a volunteer dementia expert presented the modules. Standard slides covering key topics were developed and used consistently by all presenters. The slides included video clips of nurses, physicians, social workers, family caregivers, and Alzheimer's Association staff members addressing problems of dementia patients. A binder with copies of the slides and handouts of important information was given to participants for future reference.

During Module 1, the presenter introduced the DFHI program and the subject of care of patients with dementia in a hospital setting. Topics of this module included the prevalence of dementia, the resulting societal and financial effects, high rates of hospitalization of people with dementia, the impact of these rates, common negative clinical outcomes for individuals with dementia, and discussion of why dementia friendly acute care is needed.

A medical overview of dementia and Alzheimer's disease was covered in Module 2. The learning outcomes for the participants included: defining dementia and Alzheimer's disease; differentiating between delirium, depression, and dementia; describing the components of

cognitive assessment and the diagnostic tools utilized; and reviewing pharmacological and non-pharmacological treatments.

In Module 3, the presenters informed participants of the communication and behavioral challenges that can occur when caring for individuals with dementia and suggested strategies to deal with these challenges. Participants learned how dementia affects ability to communicate, , common problem behaviors of individuals with dementia, successful interventions, and how input from family caregivers can help improve care.

An overview of specific dementia friendly care strategies was presented in Module 4. Program participants examined the best clinical practices during hospitalization in regards to safety, medication management (including pain management), activities of daily living and self-care.

The full day program concluded with Module 5. The presenters and the participants discussed why early discharge planning is important, how to identify and care for individuals who are at high risk of poor outcomes, safety and ethical concerns surrounding care, multidisciplinary approaches to care that involve family members, appropriate continued care or referral, and resources to support individuals with dementia and their caregivers including those available through the Alzheimer's Association. Of note, culture change and person centered care were purposely woven into all modules of the curriculum and comprise the philosophical underpinning for the DFHI program (McGillick & Murphy-White, 2013).

Dissemination of the DFHI Program

Staff members of the local Alzheimer's Association chapter reached out to hospital administrators and offered the DFHI program. The Association had established relationships with administrators at some hospitals and so the process started with them. When there was no prior relationship, Alzheimer's Association staff members worked with their network of volunteers to establish a connection inside the hospital. Although these connections helped to move the process along, often there were still challenges in finding the right person who embraced the program and were able to make it happen. As one Alzheimer's Association staff member noted: "We often got bounced from person to person before we talked with the correct person. The key at each hospital has been finding an internal advocate, for example, the Chief Nursing Officer, a therapy director, or the education director. Someone who is connected to the disease and is willing to work with the Association to help navigate the complicated hospital environment is essential." In one case, a hospital employee attended a program at the local Alzheimer's Association Chapter office and then advocated for the program to her employer. In one case, a hospital employee attended a program at the local Alzheimer's Association chapter office and then advocated for the program to her employer.

After a key contact person was identified, a series of meetings were held to negotiate the hospitals' participation including the costs and roles and responsibilities of each party (McGillick & Murphy-White, 2013). Hospitals had to identify an interested person to assist in planning the logistical aspects of the program, agree to allow staff time for participation, and provide break refreshments and lunch. In addition, the hospitals were asked to pay the

\$3,000 program fee to cover the cost of materials and the time and effort of Alzheimer's Association staff members. Grant funds were available to help cover the costs for those hospitals that could not pay the full program fee. The program was to be interdisciplinary and a hospital administrative representative was to be present during the program to address institution-specific questions.

After the initial arrangements were agreed on, the logistics specific to the hospital were planned including the method of invitation of staff, the time and location for the program, and incentives such as meals, and a contract was then signed. Some hospitals paid for attendees' meals and food at breaks, and other hospitals did not. One hospital requested that the program be presented on six different dates so that only a few staff members needed to attend each time, thus minimizing disruption in bedside coverage. Alternatively, another hospital hosted a single program for 92 staff members.

Providing contact hours was considered important for encouraging hospital participation and nursing personnel attendance. Using the standard continuing nursing education formula of 60 minutes per one contact hour, participants who completed the course were awarded 7 contact hours. Additionally, National Association of Social Workers (NASW) members were eligible for continuing education units related to their participation in this educational activity.

Methods

Program evaluation was conducted to examine changes in participants' attitudes/ practices, confidence, knowledge and responses to the program, and to assure that outcomes from the prior testing in Phase 2 were maintained with further dissemination of the program. Final refinements to the program and evaluation tools were completed by a team of social workers from the Alzheimer's Association and nursing experts in AD and research, including two doctorally prepared nurses and one master's prepared nurse. The Institutional Review Board at the primary author's site approved the program evaluation as an exempt protocol.

The pre- and post-questionnaires were handed out, completed and then collected at the beginning and end of the DFHI program by Alzheimer's Association staff. Names and other identifying information were not collected on the questionnaires. However, participants were asked to put an ID code consisting of the last 4 digits of their cell phone number on each questionnaire so that pre-, post-, and delayed post- questionnaire responses could be compared. In addition, participants completed a self-addressed envelope to use for mailing the 3-month follow up questionnaire.

The questionnaire included demographic questions about age, gender, race, discipline and work experience, as well as prior education in the care of individuals with dementia. Scales developed by experts for the Phase 2 programs (Galvin, et al., 2010) were also used. Attitudes and practices, such as perceived difficulty in working with patients with dementia and having enough time to provide care were measured by 6 questions using a 5-point Likert scale of responses ranging from "Strongly Disagree" to "Strongly Agree". An additional seven questions measured the participants' confidence in caring for patients with dementia,

such as confidence in assessing and recognizing dementia, managing agitation, and communicating with patients. This scale used a 5-point Likert scale of responses ranging from “Not at All” to “Extremely”. A final set of 7 questions (including multiple choice, check all that apply, and select initial response) assessed knowledge about AD and care issues such as factors contributing to increased confusion in hospitalized patients with dementia. Also, participants were asked to complete program evaluation materials about their satisfaction with the program and presenters and how well learning objectives were met. Open-ended questions were used to inquire about further needs and challenges in working with these patients.

Questionnaire responses were double entered into an Access database, and the data was cleaned and imported into SPSS for analysis. Descriptive statistics were used to examine the characteristics of program participants. To evaluate changes in attitudes and practices, confidence, and knowledge, paired sample t-tests and repeated measures analysis of variance (ANOVA) were used. The knowledge questions were analyzed for item difficulty based on percent of respondents with the correct answers.

Results

Across the five participating hospitals, the DFHI program was offered 12 times to a total of 355 individuals. Participants, primarily nurses (62.3%), also included therapists, social workers and chaplains, attended the offerings and completed the pre-test (See Table 1). Participants were mostly women (90.1%) and White (83.4%) with a mean age of 45.4 years \pm 13.1). They had many years of experience (16.4 years \pm 13.1), yet the majority (66.2%) reported having little (1 hour or less) education in the care of hospitalized patients with dementia.

For the program evaluation, 355 participants completed a pre-test questionnaire and 325 (92%) participants completed the post-test given at the end of the program and 88 individuals (25%) completed the 3-month follow-up test. Participants' scores on the attitudes/ practices, confidence, and knowledge scales were compared from the pre- to post-test and to the 3-month follow up (See Table 2). Baseline scores on the attitudes/ practices scale were least positive when asked about difficulty working with dementia patients and having enough time to provide care, and most positive about feeling family members can help with care. While the Cronbach's alpha for the scale was only 0.39, the item scores were more positive on the post-test, with statistically significant improvements in the total score. At the three-month follow up, scores remained more positive than at baseline; however, scores declined significantly for feeling that dementia patients require different care than patients without dementia.

Confidence in caring for dementia patients increased significantly for all questions and the overall scale score at the post-test and follow up. The scale performed well with a Cronbach's alpha of 0.90. Confidence in communicating with both patients and families continued to increase from the post-test to the follow up evaluation.

Scores on the 7-item knowledge test improved significantly from the pre- to the post-test, and these improvements were sustained at the follow up. The lowest scores were for identifying what is considered a restraint. Item difficulty on the pre-test was considered appropriate for all but one item, meaning the percentage of correct answers fell within the suggested range of 20% to 80% (Pratt, Wilson, Benthin & Schmall, 1992). The Cronbach's alpha was low at 0.21. The improvements in scores suggested that the DFHI program covered the information asked in the knowledge questions.

Overall, participants rated the program as effective on the program evaluation form. They reported that they learned new information and that the information covered in the program was helpful to them in their work (see Table 3). When participants were asked what they liked best about the program, they responded that they liked the knowledge and effectiveness of the various program presenters. One participant wrote, "The speakers were very dynamic and knowledgeable; everything was very organized." Participants also liked that they were leaving with new ideas for how to care for their patients with dementia. One participant noted, "[I] learned so much information that can be directly applied in my workplace; [I] feel more comfortable now in [the] care of dementia/ Alzheimer's patients." In addition, participants reported that the provided materials, including handouts from the Hartford *Try This* series, were beneficial. One attendee commented: "The content, binder, and progression of materials were very appropriate and informative. I appreciate the amount of materials we were able to keep for future reference." Also, participants noted that the content was informative and comprehensive, and that the videos were helpful in demonstrating important concepts.

Suggestions for improving the program included shortening some of the modules and/ or the total length of the program, further reducing redundancy, including even more ways for the participants to interact and actively participate in the program, and providing more interventions and activities to use when caring for patients with dementia. Some stated that they wished administrators had attended the program. One participant wrote: "Administrative personnel should have attended because staff doesn't feel they understand our needs or concerns or difficulty dealing and caring for dementia patients."

Discussion

The DFHI is an educational program aimed at educating acute care staff in the care of patients with dementia and highlighting practical steps to take to address those unique and complex needs. Participants found the program effective, practical and filled with information they could apply directly to their work. The DFHI program improved attitudes/practices, knowledge, and confidence of attendees, similar to the findings of Galvin et al. (2010). These findings provide further evidence that the program is a useful way to inform healthcare workers in meeting the special care needs of individuals with dementia.

Because the patient with dementia is at increased risk for complications during hospitalization, prolonged hospital stays and re-admission, the care requirements of these patients are complex and best served by an interdisciplinary approach (Inouye, Bogardus, Baker, Leo-Summers, & Cooney, 2000; Flaherty, Tariq, Raghavan, Bakshi, Moinuddin, &

Morley 2003). The requirement set forth by the program developers that members from multiple professions and patient care technicians be invited to attend, led to a primary strength of the program: interdisciplinary discussion of case studies and engagement in other interactive components. Moreover, by helping the team members to share an understanding of the communication and other special needs of these patients and their caregivers, all parties, including the patient care providers, are likely to be more satisfied with the care that is provided.

The program evaluation was slightly revised for Phase 3 of the DFHI program and the questionnaire scales successfully measured improvements in each area. The attitudes/practices and knowledge questions did not work well as scales. Some items were not related to key program content, but future program providers may choose to use these items to measure concepts of interest. As mentioned earlier, attitudes/practices scores were more positive in follow-up except for the score of the participants' feeling that dementia patients require different care than patients without dementia. A possible explanation for this is because the program presenters' emphasized person centered care as a quality approach to all patients regardless of diagnosis. The confidence scale had good psychometric properties measuring the comfort level of participants in providing direct care to patients with dementia. For broader dissemination, the confidence scale could be revised to include additional practice concepts from the other scales. For example, confidence in caring for dementia patients without using restraints would provide a better measure of this concept beyond simply identifying different types of restraints. Confidence in distinguishing dementia from delirium, and identifying causes of wandering could also be included. Developing one unified evaluation scale would make data collection easier for future dissemination.

While the program evaluations were overwhelmingly positive, some comments suggest there could be additional revisions in the program flow and materials and additional interactive activities included. Program content will require regular updates to stay current with the evidence and other changes in the field. For example, best transitional care practices recently published in the literature could be added to the last module. Preparatory readings or independent web-based components are under consideration as ways to enhance the program.

Since one goal of this program is the introduction of participants to the resources and staff of local Alzheimer's Association chapters, follow up meetings between key attendees and local Alzheimer's Association staff could further foster those relationships. In general, Alzheimer's Association chapters have outstanding education programs for family caregivers and long term care providers; however, their expertise has traditionally been underutilized in acute care settings. DFHI provides a mechanism for Alzheimer's Association chapters to build relationships with hospital staff and better advocate for their constituents who are heavy users of acute care services.

Implications

Ideally, we want to know if an educational program changes practice. Identifying changes in various aspects of patient care, such as use of restraints, identification and management of

agitation, and the satisfaction of workers in caring for patients with dementia would strengthen the evaluation. While this was not an option for this evaluation, staff identified application of the program to their practice both in the evaluation and during the program, such as when they developed a call to action, and discussed cases. The evaluation of this dissemination adds evidence that the DFHI program improves the attitudes/ practices, confidence and knowledge of healthcare workers related to care of patients with dementia.

Several steps can be taken to further disseminate the DFHI program. A program to teach interested staff in how to promote dementia friendly care among their colleagues or a web-based DFHI training program could be developed. Additional dissemination activities to consider include providing training materials for others who want to offer the program or certificates of completion so that participating hospitals, nurses, and other staff are duly acknowledged for completing the program.

Another logical step is determining how to sustain a successful education program, which depends on several components. Funding from the Research Retirement Foundation and a John A. Hartford Foundation Practice Change Fellowship was crucial for implementation of the DFHI education program for this project. Also important, the Alzheimer's Association St. Louis Chapter in partnership with the Knight Alzheimer's Disease Research Center (ADRC) at Washington University, supported initial program development and ongoing refinement of the program. Another factor that contributed to the success of this program was the strong collaborative spirit connecting the acute care providers, the Alzheimer's Association and local academicians. This work as reported here also depended heavily on the pro bono work of committed professionals who served as faculty, advisors and program evaluators. Finding ways to support ongoing funding and provision of the program is needed for program sustainability, as the program has the potential to benefit hospitals across the country. Future projects could explore cost savings for hospitals that implement the program to justify the expenses.

Conclusion

Study findings support the use of the DFHI program as a method to foster recognition of hospitalized patients with dementia and to promote knowledge of their special needs in hopes of minimizing avoidable adverse events in this vulnerable population. The need for educational programs such as the DFHI will only increase as the population of older adults grows. This relatively inexpensive education program has the potential to support persons with dementia, their family caregivers, hospital staff, and the goals of hospital administrators to provide quality, cost effective care. In addition, the program has the potential to be disseminated broadly and successfully to additional hospitals and staff members and because of the potential for mutual benefit, this program may contribute to the collaboration of hospitals and local Alzheimer's Association chapters.

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Table 1

Baseline Characteristics of Program Participants (N=355)

Characteristic	Total Sample N= 355	Nurses Only N = 221
Age (y), M (SD)	45.4 (13.1)	45.7 (13.3)
Gender, n (%)		
Male	33 (9.3)	15(6.8)
Female	320 (90.1)	204(92.3)
Ethnicity, n (%)		
Caucasian	296 (83.4)	190 (86.0)
African American	42 (11.8)	20 (9.0)
Asian	3 (0.8)	2 (0.9)
Hispanic	5 (1.4)	4 (1.8)
Profession, n (%)		
Social Worker	10 (2.8)	
Pastoral Care	14 (3.9)	
Nurse	221 (62.3)	221 (100)
Nursing Assistant	26 (7.3)	
Physical Therapist	20 (5.6)	
Occupational Therapist	21 (5.9)	
Physician	1(0.2)	
Speech Pathologist	1(0.2)	
Other	37 (10.4)	
Years in Profession, M (SD)	16.4 (13.1)	16.9 (13.7)
Work Setting, n (%)		
Hospital	300 (84.5)	199 (90.0)
Nursing Home	23 (6.5)	
Home Care	5 (1.4)	11 (5.0)
Hospice	2 (0.6)	10 (4.5)
Other	21 (5.9)	1 (0.5)
Role, n (%)		
Staff	320 (90.9)	194(87.8)
Administrator	17 (4.8)	15 (6.8)
Other		12 (5.4)
Nursing Degree, n (%)		
LPN		11 (4.9)
Diploma RN		37 (16.7)

Characteristic	Total Sample N= 355	Nurses Only N = 221
ADN		44 (19.9)
BSN		94 (42.5)
MSN or higher		35 (15.8)
Social Work Degree, n (%)		
Bachelor's	1 (0.2)	
Master's	13 (4)	
Work Schedule, n (%)		
Day shift	270 (76.1)	156 (70.5)
Evening shift	14 (3.9)	10 (4.5)
Night shift	50 (14.1)	40 (18)
Percentage of Older Patients, M (SD)		
60 and older	51 ± 25	50.6+ 26.3
75 and older	36 ± 26	34.2+ 24.2
85 and older	26 ± 25	24.9 + 22.8
Hours of Education on Dementia , n (%)		
None	174 (49)	112 (50.7)
1 hour	61(17.2)	41 (18.6)
2 hours	42 (11.8)	27 (12.2)
3 hours	27 (7.6)	12 (5.4)
More than 3 hours	4 (1.1)	27 (12.2)

Table 2

Changes in Attitudes/Practices, Confidence, and Knowledge among Program Participants

	Pre-Test N=355	Post-Test N=325	3-month Follow Up N=88
Attitudes/ Practices	<i>m</i> (SD)	<i>m</i> (SD)	<i>m</i> (SD)
Dementia patients are difficult to work with	2.54 + 0.95	2.50 + 0.93	2.64 + 0.94
Have enough time to work with dementia patients	2.97 + 1.04	2.99 + 0.93	2.65 + 1.03
Family can help	4.39 + 0.7	4.56 + 0.9	4.61 + 1.2
I have received sufficient training	2.86 + 0.9	3.97 + 1.0	3.74 + 1.1
Care is different for patients with dementia	3.81 + 0.9	4.23 + 0.9	4.13 + 1.3
Usually know if patients have been diagnosed	3.42 + 1.0	3.46 + 1.1	3.65 + 1.1
Total Score ***	2.59 + 0.44	3.57 + 0.40	3.54 + 0.43
Confidence-7 Items	<i>m</i> (SD)	<i>m</i> (SD)	<i>m</i> (SD)
Assessing and recognizing dementia	2.88 + 1.0	3.35 + 1.0	3.18 + 0.9
Managing care for dementia	2.96 + 1.0	3.45 + 1.1	3.36 + 1.1
Managing agitation	2.72 + 1.0	3.26 + 1.0	3.09 + 1.2
Differentiating delirium and dementia	2.45 + 1.1	3.29 + 1.0	3.11 + 1.1
Recognizing discharge needs	2.62 + 1.2	3.40 + 1.2	3.37 + 1.3
Communicating with person with dementia	3.0 + 0.9	3.48 + 0.9	3.50 + 1.1
Communicating with the family	3.30 + 1.0	3.77 + 1.1	3.87 + 1.2
Total Score ***	3.06 + .78	3.45 + .69	3.35 + .91
Knowledge Questions – 7 Items	% Correct	% Correct	% Correct
Percent over 85 with dementia	47.2	72.7	51.1
Main risk for AD	72.8	84.4	90.0
Factors that increase confusion in dementia patients	47.2	54.4	52.6
Initial response to confused patient	93.3	96.6	98.1
Distinguish delirium from dementia	87.2	93.9	96.1
Causes of wandering	67.2	89.0	87.8
Identify restraints	31.7	39.4	48.9
	<i>m</i>(SD)	<i>m</i>(SD)	<i>m</i>(SD)
Total Scores ***	4.89 + 1.41	5.01 + 1.06	5.27 + 1.03

p < .001 repeated measures ANOVA

Table 3

Continuing Education Program Evaluation Ratings

Component	Strongly disagree #(%)	Disagree #(%)	Not sure #(%)	Agree #(%)	Strongly agree #(%)	Aggregate (1-5)
Overall, I was satisfied with this program	2 (.7)	1 (.4)	4 (1.4)	100 (35.3)	176 (62.2)	4.6
I would recommend this program to others	2 (.7)	2 (.7)	4 (1.4)	90 (31.8)	185 (65.4)	4.6
The presenters were effective	2 (.7)	0	4 (1.4)	92 (32.6)	184 (65.2)	4.6
I learned something new	2 (.7)	2 (.7)	3 (1.1)	89 (31.6)	186 (66.0)	4.6
I learned something I can use	2 (.7)	0	5 (1.8)	88 (31.1)	188 (66.4)	4.6

Rating scale = 1 (strongly disagree) to 5 (strongly agree).