Does Continuing Education in Gerontology Lead to Changes in Nursing Practice?

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Abstract:
Continuing education (CE) is intended to enable nurses to pursue their professional development, be lifelong learners, and function in their roles safely and proficiently. The challenge for those providing CE programs for practicing nurses has been to establish the importance of these programs for improving nursing practice and patient outcomes. It is difficult to determine whether nurses who attend these courses implement what they have learned because evaluation methods are varied, are limited to isolated programs, and have focused on teaching strategies. This article describes two models of CE programs in gerontological nursing for practicing RNs, both of which use interactive and collaborative teaching strategies to teach best practices in geriatric nursing, as well as changes in nursing practice resulting from education.

Article:
Adults age 65 and older numbered 37.3 million in 2006, representing 12.4% of the U.S. population, or approximately one in every eight Americans. It is estimated that by 2030 there will be approximately 71.5 million people age 65 and older, and they will constitute approximately 20% of the total U.S. population (U.S. Administration on Aging, 2008). Many older adults live with complex functional and health-related problems, and they currently make up the bulk of health care consumers (Burbank, Dowling-Castronovo, Crowther, & Capestuti, 2006). Those age 65+ represent 50% of hospitalizations, 85% of home care visits, and more than 90% of nursing home residents (Bednash, Fagin, & Mezey, 2003). Thus, there is an urgent need for nurses knowledgeable in gerontology to work with the older adult population. Even nurses with many years of experience need to enhance and update their geriatric knowledge and skills to provide effective and efficient age-specific care in diverse settings (Kovner, Mezey, & Harrington, 2002).

Continuing education (CE) is intended to enable nurses to pursue their professional development, be lifelong learners, and function in their roles safely and proficiently. RNs have always been encouraged by professional organizations to update their knowledge and maintain clinical competence. Despite an increasing body of empirical research, the impact of CE on nursing practice remains unclear (Griscti & Jacono, 2006). The challenge for those providing CE programs for practicing nurses has been to establish the importance of these programs for improving nursing practice and patient outcomes (Henderson & Winch, 2008). It is difficult to determine whether nurses who attend these courses implement what they have learned because evaluation methods are varied, are limited to isolated programs, and have focused on teaching strategies.

A comprehensive literature review suggested that CE programs are more effective when they are constructed to encourage health professionals to take the initiative and direct their own learning (Griscti &
Jacono, 2006; Satterlee, Eggers, & Grimes, 2008). Participatory learning activities have been found to lead to positive changes in participants’ attitudes, beliefs, and confidence levels (Vadlamudi, Adams, Hogan, Wu, & Wahid, 2008); improve infection rates (Costello et al., 2008); and increase time spent in patient counseling activities (Drevenhorn, Bengtson, Allen, Saljo, & Kjellgren, 2007).

The University of North Carolina at Greensboro School of Nursing (UNCG) and the University of Texas Health Science Center at Houston School of Nursing (UTH) were awarded Comprehensive Geriatric Education Program grants by the Division of Nursing of the Health Resources and Services Administration (HRSA) (D62HP01905-06-00 and D62HP06856-01-00, respectively). This article describes these two train-the-trainer models of CE programs in gerontological nursing for practicing RNs and presents examples of consequent improvements in nursing practice as described by individual participants. Both programs included a series of face-to-face workshops that provided information about evidence-based gerontological nursing practice using national standards established by the American Association of Colleges of Nursing and the Hartford Institute for Geriatric Nursing (Capezuti, Zwicker, Mezey, & Fulmer, 2008; Reuben et al., 2004). Both used interactive and collaborative teaching strategies and required participants to complete clinical projects. Both programs included electronic distance learning components that provided content, extensive resources, and ongoing participant interaction and mentoring.

THE UNCG EXPERIENCE

The specific purpose of the Geriatric Workforce Enhancement Project (GWEP) was to establish a train-the-trainer model in which practicing RNs were prepared as geriatric resource nurses to provide geriatric care and teach other nursing personnel how to provide culturally competent geriatric care in urban, rural, and medically underserved areas. Educational programs focused on basic and advanced gerontological nursing topics for nursing assistants, RNs, and licensed practical nurses (LPNs).

GWEP faculty collaborated with three health care systems and three Area Health Education Centers (AHECs) to recruit participants to these programs, provide physical and educational support, monitor participant statistics, provide CE credits, and assist in evaluation of the programs. Because extensive evaluation of outcomes was requested, Institutional Review Board approval was obtained and participants signed consent forms. Those who did not provide informed consent participated in the workshops and received CE credits upon successful completion, but their data were not used in the evaluation. Basic and advanced geriatric nursing programs were designed for both RN and LPN audiences. This article reports on the RN participants only (n = 175).

Workshop Descriptions

RN attended a 20-hour, 4-day basic geriatric nursing care program. Workshops were held at hospitals, central AHEC classrooms, and community sites so rural participants could attend without significant travel. Approximately half of those nurses chose to also attend an 8-hour workshop on teaching the geriatric nursing content and a 12-hour online advanced interactive geriatric nursing course. The learning experience for participants who attended the three courses was approximately 6 months. As stated above, evidence has suggested that CE programs are more effective when they encourage nurses to direct their own learning (Griscti & Jacono, 2006; Satterlee et al., 2008). Therefore, the teaching approaches for both the face-to-face and online sessions were collaborative, participatory, and interactive.

Basic Geriatric Nursing Care

The 20-hour basic course was presented as four 5-hour sessions that provided participants with current scientific information on age-related changes, common health problems of older adults, and social and psychological issues of aging. The workshops also included information about evidence-based gerontological nursing practice, based on national standards published by Capezuti et al. (2008) and Reuben et al. (2004). The basic program provided the foundational geriatric nursing content that trainers
would be teaching to other nursing personnel. CE instructors used a variety of learning strategies that required groups of participants to react to simulated geriatric health care situations in structured class environments and engage other nursing personnel and older adults in their facilities and in the community through "homework" assignments.

Teaching Geriatric Nursing Care
Nurses who chose to progress to become "geriatric trainers" attended an 8-hour workshop focused on teaching in staff development settings in their home agencies. An intensive face-to-face session focused on planning a class (i.e., purpose, learning goals, time allotments, teaching strategies, evaluation of learning and teaching). Participants learned how to address different levels of personnel and different learning styles, choose appropriate content, and use teaching resource materials.

Participants were involved in three teaching demonstrations during the workshop, with feedback from the instructor and peers. Participants in the teaching workshops received teaching manuals that included modules of geriatric content, along with learning objectives, teaching notes, presentation PowerPoint® slides, suggested teaching strategies, references, and posttest questions. Participants were required to conduct a geriatric teaching session at their home agencies with close mentoring by GWEP faculty.

Geriatric Nursing Care Trainer Interactive Sessions
The 12-credit online advanced geriatric nursing course was designed for participants who wished to complete study requirements for the American Nurses Credentialing Center (ANCC) (2007) certification in gerontological nursing examination. The course resided on a secure Web server and was available to participants for 6 weeks after initial log on. It included units on complex health problems of older adults, communication issues (e.g., confidentiality, documentation, interdisciplinary communication, communication barriers and accessibility), leadership and management, research and evidence-based practice, and community health and lifestyle changes in aging. Learners were required to read and respond to reflective questions and prompts. Learning activities assured that participants involved others in their agencies in change activities such as preparing teaching bulletin boards and pamphlets, conducting chart reviews, interviewing managers, and conducting policy and procedure reviews.

Evaluation of Changes in Nursing Practice
Attendees at all workshops were required to complete out-of-class experiential learning activities and to share their experiences with other learners through reflective journals, class discussions, small group activities, and short papers. In addition, nurses were asked to complete action plans listing activities they planned to undertake in the next 3 to 6 months to promote the integration of geriatric best practices in their home agencies.

THE UTH EXPERIENCE
The Geriatric Resource Nurses (GRN) Project was an educational training program designed to prepare a core group of geriatric resource nurses to function as "experts" in best geriatric nursing practices and to teach other health care providers best practices in caring for older adults. Because most nurses have little geriatric content in their formal education, the training was designed to minimize this deficit. The GRN Project trained practicing nurses in best practices and provided leadership training so participants could, in turn, train other nurses and health care personnel to provide better care for elderly patients in hospitals, nursing facilities, and at home.

GRN Project Overview
To accomplish this, participating RNs attended four 1-day seminars; they also planned and implemented a best practices clinical intervention in their facility. A dedicated and dynamic Web site supplemented the training and provided resources, and a discussion board permitted communication. The training was enhanced by a GRN council, which met quarterly and was open to all participants; this council is expected to continue to facilitate dispersion of best practices after grant completion. The
workshops and the GRN council sessions have provided CE at a time when hospitals are opening geriatric units to accommodate retiring Baby Boomers.

Meeting in a workshop format for a full day once per month, RN participants were taught geriatric content and leadership. Because Texas is ethnically diverse with rapidly growing older Hispanic and Asian populations, attention was given to providing culturally competent care. As an outreach to rural and suburban areas, the sessions were teleconferenced to distant community hospitals, thus permitting participants at home base and in outlying classes to learn in an active learning environment.

Clinical/Academic Projects
All participants planned and executed a clinical/academic project (CAP) that implemented a best practice guideline or provided quality improvement. The planning process began during the workshops, and participants, working mostly in small groups, planned an intervention that could be implemented on their unit. The groups had 2 months to work on and adapt their CAP, the design and outcomes of which were presented to the entire group in the fourth workshop. In this way, the instruction stretched over a 6-month period, and because of the interaction permitted between staff and workshop participants and the resource materials made available on the Web site, participants had opportunities for both acquiring knowledge and demonstrating skills.

The CAP involved a clinical aspect in that it taught participants to plan and evaluate best practices. The GRN staff provided constant monitoring, assisted by hospital-based mentors. Where mentoring and administrative support were provided, nurses were successful in incorporating their interventions into practice. Educational dispersion of the CAPS has ranged from posters to unit in-service sessions using a game format, and actual practices covered syndromes such as incontinence, mobility, and fall prevention.

Educational Content
Educational materials (e.g., the Hartford Institute for Geriatric Nursing) were made available via the GRN Web site (http://geroresourcenurse.org/grn/index.htm). The Web site was dynamic, and content was enhanced as each cohort discovered resources and planned clinical practices. A by-product not originally intended is that nurses had to be taught Web and computer literacy to adequately use the Web site. The program had a minimum of 40 contact hours, including the clinical project.

Content on geriatrics basics and best practices was presented in the workshops and videotaped for review on the Web site at any time. The content emphasized concepts and syndromes common in older adults, including falls, restraint, incontinence, malnutrition/dehydration, confusion, and polypharmacy. Culturally competent care, interdisciplinary teamwork, and leadership/coaching skills were included. The best practice materials were adapted for participant use from previously funded HRSA grants at UTH, the Hartford Institute for Geriatric Nursing, and the Nurses Improving Care for Healthsystem Elders (NICHE) program (Mezey et al., 2004). On completion of the resource training program, RNs who met the qualifications set by the ANCC for gerontological nursing certification were encouraged to take the gerontological nursing examination.

Program Participants
Four workshop sessions were held at the school, which is located in a large medical center in the nation's fourth largest city, and the fifth was teleconferenced among hospitals in the outlying suburban areas. Because the need for geriatric training is so great, recruitment of RN participants was not a problem. In fact, up to 8 additional participants were added to the cohorts to meet demand. Five groups of RN participants have completed the 6-month sessions. Averaging 20 participants per cohort, approximately 85 RNs have been trained, mentored, and retained in the program over time through Web site use and GRN council membership.
These RNs affect the care of older adults through using geriatric best practices in their service areas. They can then instruct and monitor other RNs, licensed vocational nurses and LPNs, and nursing assistants who provide most of the direct care for older adults. The RNs attending the program were unit managers, staff educators, and staff RNs from a unit providing care to predominantly older adults in acute care hospitals, long-term acute care hospitals, nursing facilities, home health agencies, and hospice organizations. In addition, the RN participants were primarily from minority and under-served backgrounds.

**Program Evaluation**

Although ongoing formative evaluation was carried out during the grant period, the CAP projects contained an evaluative component that included a baseline assessment of the nursing practice in the institution prior to implementation of the CAP. A follow-up assessment was also performed to determine whether the project actually made a change in policy, procedure, and nursing practice, as intended. To date, a number of the participants have reported that their projects have been incorporated into care on the units and that these changes are having a positive effect on the quality of care.

**CHANGES IN NURSING PRACTICE RESULTING FROM CONTINUING EDUCATION**

It is essential to evaluate whether CE programs meet their desired outcomes. Different strategies have been adopted to ascertain whether nurses become more competent in their practice. Again, there is a dearth of information regarding the efficacy of these strategies (Furze & Pearcey, 1999). One way is through self-reports and surveys. The anecdotes below demonstrate the changes that resulted from these two CE programs, as related by participants.

After a session on sensory changes in aging, one long-term care nurse administrator noted that the fall rate in her facility was above national and state averages. She noted that the resident bathrooms were all white and the stairways were carpeted. She replaced the white toilet seats with black seats and had colored stripes installed on all stairs and ramps. She reported a significant decrease in fall rates 2 months after making these changes.

Another unique strategy nurses instituted to decrease fall rates was the Falling Leaves program. One to four leaf cutouts were placed on residents' doorways as decorations so everyone passing could identify rooms where residents who were at high risk for falls were located.

Nurses in both acute and long-term care facilities installed picture boards in patient/resident rooms for personal items. The boards portray older patients with family and friends, engaged in activities of interest. One nurse instituted a program for nursing assistants to conduct "life interviews" with individual residents to learn more about the residents and to practice interview skills. The nursing assistants were given money and time to create individual collages that would represent the residents' life stories and characteristics.

One nurse talked of instituting activities that would celebrate aging in her community. "After all, the elders in the community are our patients," she said. The class group enthusiastically brainstormed ideas to celebrate aging in their town, such as posting news items about seniors who made significant contributions to community and health care on an "Aging is Great" bulletin board and having an older adult cultural awareness festival to educate nursing staff about minorities in their agency.

Participants suggested activities to help nursing staff appreciate themselves as aging individuals, such as contests in which staff members brought in pictures of themselves as children and then tried to match pictures with individuals, and storytelling sessions of admired older relatives or acquaintances. It was suggested that rewards and recognitions for positive behaviors related to aging would raise staff awareness of their conduct and actions toward older patients and residents.
Nurses felt emboldened with their new knowledge in geriatrics; for example, one nurse expressed surprise and pride as she recounted asking an attending physician to take patients off fluid and dietary restrictions and encourage getting patients off of bed rest as soon as possible. One particularly creative nurse instituted a "Roll Over Beethoven" turning program. The unit secretary played appropriate music every 2 hours to remind patients, residents, staff, and families to change older residents' anatomical positions. The staff and families enjoyed the music and have added singing and dancing to the routine. The musical theme continued in a sleep program that included education for staff and older patients about sleep patterns in aging, with interventions such as soothing music and sounds to encourage relaxation and sleep. Participants planned to include physical therapy and pharmacy departments in planning.

The agencies supported the adoption of geriatric best practices into the institution's culture, such as the creation of a geriatric taskforce within the quality assurance committee. This geriatric taskforce took on a project to review all the current postoperative orders for medications that are on the Beers list of potentially inappropriate medications for older adults, and they are working to have these medications changed.

Nurses decided to include housekeeping and maintenance personnel in resident and family orientations and in initial meetings with patients and families. Participants also decided to include questions related to geriatric competencies and interest when hiring personnel and to add goals and criteria related to geriatrics to staff evaluation processes.

One nurse informally talked with her emergency department peers about what she had learned about elder caregiving. The nurse requested a geriatric case manager for the older "frequent flyers" (i.e., frequent emergency department patients) to help families identify community resources for caregiving. Many participants established subtle but impressive changes, such as revised policies for room sharing, family caregiver telephone times, magnifying glasses for teaching and consents, activity kits, hydration programs that include limiting fluid and dietary restrictions, and enhanced mobility programs.

Not only were the RN participants encouraged to complete their clinical assignments, but their mentors assisted in unit needs assessments and arranged for interdepartmental presentation of the procedure and results. In addition, the nurses formed a GRN council for RN participants in their institution. Projects have included hourly bathroom checks, improved nutritional intake, and pain management for older adults.

**SUMMARY**

One objective of CE is to sustain enthusiasm in nurses who want to learn about gerontology and another is to stimulate similar eagerness in less-motivated nurses, simply by involving them more in educational sessions and knowledge acquisition. Participatory learning activities seemed to excite the nurses who participated in these programs, suggesting the need for more active learning approaches when planning CE programs. CE can be more effective if teachers make learning experiences diverse and appealing. If CE is not achieving its goal of ensuring that nursing professionals are competent and safe to practice, it is important to implement alternative measures to promote knowledge acquisition and continued enthusiasm in a constantly changing environment.

It is clear that nurses who attended these participatory and interactive education programs on geriatric best practices were motivated to make subtle and significant changes to their practice. The collaborative clinical projects, along with participant interaction and extended mentoring, were the key to lighting the fires of change in their attitudes, beliefs, and confidence levels.
REFERENCES


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