



Evaluation of End-of-Life Nursing Education for Continuing Education and Clinical Staff Development Educators

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This article presents data from the 1-year follow-up of the three conferences targeted toward continuing education (CE) providers and staff development (SD) educators and reviews the train-the-trainer model used in disseminating the End-of-Life Nursing Education Consortium (ELNEC) curriculum. The analysis has implications for educators to promote improved end-of-life (EOL) care in their own institutions.

In 1997, the American Association of Colleges of Nursing (AACN) convened a meeting to outline nursing competencies necessary to provide quality care to patients and families. This meeting was entitled *A Peaceful Death: Recommended Competencies and Curriculum Guidelines for End-of-Life Care* (American Association of Colleges of Nursing, 1997). From 1997 to 2000, researchers at the City of Hope National Medical Center (COH) conducted a project titled, “Strengthening Nursing Education to Improve End-of-Life Care.” The research conducted during the course of this project demonstrated major deficiencies in palliative care education in nursing school curricula (Ferrell,

Virani, & Grant, 1999). For example, only 2% of the content found in leading nursing textbooks was dedicated to end-of-life (EOL) care (Ferrell, Virani, & Grant, 1998). In addition, nursing faculty stated they felt inadequate in teaching EOL content. Results from similar national studies came to the same conclusion—nurses were not prepared to provide optimum EOL care (Ferrell, Grant, & Virani, 1999; Ferrell, Virani, Grant, Coyne, & Uman, 2000). In 1999, AACN and COH initiated collaboration to develop a national education program on EOL care for registered nurses. This national project, End-of-Life Nursing Education Consortium (ELNEC), was launched in February 2000 to assist nurses in reducing the burden and distress of those facing life’s end and to offer support for the many physical, psychological, social, and spiritual needs of patients and their families (Matzo, Sherman, Penn, & Ferrell, 2003; Sherman, Matzo, Panke, Grant, & Rhome, 2003).

Because of the numerous years of deficiencies in teaching EOL content in schools, nurses are working in hospitals, clinics, and community settings without knowledge of how best to assist patients and families facing the end of life (Ferrell & Coyle, 2002). Previous literature also has documented that nurses face ethical dilemmas such as conflicts about administering pain medication to patients at the end of life, communicating with patients and families, and nursing involvement in

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patient decision making regarding withholding/withdrawing life-sustaining treatments (American Nurses Association [ANA], 1991, 1992, 1994; Asch, 1996; Campbell, Bizek, & Thill, 1999; Cramer, McCorkle, Cherlin, Johnson-Hurzeler, & Bradley, 2003; Griffie, Nelson-Marten, & Muchka, 2004). In an effort to reach these nurses currently in clinical practice, the ELNEC investigators believed it was vital to train continuing education (CE) providers and staff development (SD) educators.

The ELNEC project was developed as a 3-day, train-the-trainer program, with the intent that the CE providers and SD educators would return to their clinical settings and disseminate the information to nurses in their facilities through training courses. The 1000-page ELNEC curriculum provides the educators with PowerPoint slides, “talking points” for each slide, case studies and other teaching strategies, and numerous key references for each of the nine modules. The nine components of the ELNEC curriculum include the following:

- Nursing Care at the End of Life
- Pain Management
- Symptom Management
- Ethical/Legal Issues
- Cultural Considerations
- Communication
- Loss/Grief/Bereavement
- Achieving Quality Care
- Preparation for and Care at the Time of Death (Matzo, Sherman, Penn, & Ferrell, 2003).

Funding from the Robert Wood Johnson Foundation (RWJF) supported eight initial courses, with three targeted specifically for CE providers and SD educators. The purpose of this article is to describe the model used in disseminating the ELNEC curriculum and to present data from the 1-year follow-up of these three conferences specifically targeted toward CE providers and SD educators to demonstrate the outcomes of this education.

LOGISTICS OF DISSEMINATION

One of the major goals of the ELNEC project was to develop a core of expert educators and provide teaching resources to enhance EOL competency in CE. In February 2000, four curriculum consultants met to discuss ELNEC content and program development. Identification of faculty and establishment of agenda for the course were completed. In March of 2000, the Advisory Board met and received input on the ELNEC project’s course development and evaluation process. Over the next few months, the ELNEC Web site was developed and launched, dates and locations for upcoming courses were established, applications were developed and evaluations, as well as the curriculum and resources for the ELNEC course, were finalized.

Various educational modalities were used to present the ELNEC curriculum. For example, not only was the content presented in lecture form but also role-plays, small group sessions, case study discussions, movie/video clips, and “town hall meetings” were used to disseminate information.

Each of the nine modules was reviewed via PowerPoint presentation. Each slide, corresponding with the ELNEC curriculum, had “talking points” for the participants to use when they presented. Participants praised this material and many referred to these “talking points” as “gifts of time.” The curriculum was current and proved to be relevant to the participants’ needs. After the PowerPoint slides had been reviewed in a particular module, the instructor would highlight the teaching strategies. For example, some of the teaching strategies found in “Module 2: Pain Management” included assessment tools, equi-analgesic charts, list of opioid and non-opioid medications, and alternative therapies in managing pain. The use of videos was a powerful tool in conveying certain points. For example, a clip from *Terms of Endearment* (where the mother runs to the nursing desk demanding pain medication for her daughter) was an excellent visual of the emotion of pain, not only for the patient but also for the family. Other discussion points were brought up as participants were encouraged to come to a microphone and discuss what they had seen in the video. To further reinforce the material, case studies were reviewed in small groups. Role-playing, involving the participants, was effective. For example, participants played the role of a family member, nurse case manager, ethicist, staff nurse, or other member of the interdisciplinary team. The ELNEC faculty found this a very effective way of reinforcing numerous points in the various modules.

In addition to the 1000-page hard copy of the ELNEC syllabus, each participant received a CD-ROM that contained the entire syllabus, including PowerPoint slides. The CD-ROM would permit the participant to download the goals, key messages, outlines, “talking points” for each slide, PowerPoint slides (three slides/page), references, case studies, and supplemental teaching resources for each of the nine modules. The CE providers and SD educators were particularly grateful as objectives for each of the modules were provided for applications for CE credits. All ELNEC materials are copyrighted and each participant is free to use/duplicate any of the resources in the ELNEC syllabus, as long as he/she cites the attribution statement.

METHODS

Since its inception, the ELNEC project has included a very intensive evaluation plan. Applicants for the

ELNEC course were required to complete an extensive, competitive application process to demonstrate goals for the dissemination of the curriculum after attending the course. In addition, applicants were required to have a letter of support from administrators to ensure success in implementation.

Applicants developed pre-course goals and participated in pre-course evaluation of their institutions' educational efforts. Three evaluation instruments were used: (1) an application form that described the participants and their work setting; (2) a pre-survey that allowed participants to characterize their perceptions and evaluate their EOL education efforts prior to ELNEC; and (3) a 12-month post-survey that provided for re-assessment of their educational programs and impact of

TABLE 1 ELNEC CE Providers and SD Educators Characteristics (N = 227)

Position	n	%
Staff Nurse	14	6.2
Advanced Practice Nurse	57	25.3
Educator	60	26.7
Manager/Coordinator	51	22.7
Director/CEO	34	15.1
Other	9	4.0
Number of years in nursing education		
Mean = 10.52, median = 10.00		
CE/SD program affiliation		
Specialty Nursing Organization	24	12.8
University/School of Nursing based	23	12.2
Independent CE provider	17	9.0
State Nursing Association	5	2.7
Clinical Staff Development	152	80.9
Primary setting for implementing ELNEC education		
Hospital	108	67.1
Home health	42	26.1
Clinic/outpatient	32	19.9
Long-term care	38	23.6
Palliative care	39	24.2
Hospice	37	23.0
Other	33	20.5
College/university CE department	64	31.8
Independent CE provider	51	25.4
Specialty nursing organization	26	12.9

TABLE 2 Content Adequacy of Course Curriculum

Module	Post-Survey Mean
Module 1	
Nursing Care at EOL	6.77
Module 2	
Pain Management	7.35
Module 3	
Symptom Management	6.88
Module 4	
Cultural Aspects	6.23
Module 5	
Ethical/Legal Issues	6.71
Module 6	
Communication	7.01
Module 7	
Grief/Loss	6.87
Module 8	
Preparation for Time of Death	6.68
Module 9	
Quality of Life at EOL	6.75

Rated 0 = not adequate to 10 = very adequate.

ELNEC in terms of numbers of students/participants influenced and methods of curriculum change.

The pre-course goals were reevaluated by the participants immediately post-course, and at 6 and 12 months. Six- and 12-month evaluation data were collected by mail with follow up by e-mail and phone to ensure the greatest completion.

A total of 261 CE providers and SD educators attended the national ELNEC courses, and 12-month data were collected on 227 educators (87%) and used for this analysis.

RESULTS

Demographics

A summary of the participants is found on Table 1. Educators from 49 states, the District of Columbia, and British Columbia participated. The participants were in roles of educator (26.7%), advanced practice nurse (25.3%), manager/coordinator (22.7%), director/CEO (15.1%), staff nurse (6.2%), and other roles (4%). These percentages tally more than 100% as some educators fill more than one role in an institution. The

participants ranged from 0 to 40 years of experience in CE/SD with a mean of 10.52 years. The CE/SD program affiliation included clinical SD (80.9%), specialty nursing organizations (12.8%), university/SON-based (12.2%), independent CE provider (9.0%), and state nursing association (2.7%) (see Table 1). The CE/SD participants reported using ELNEC materials in a variety of work settings with the top three listed as hospitals (67.1%), college/university CE department (31.8%), and home health agencies (26.1%). Other areas include independent CE provider (25.4%), palliative care (24.2%), long-term care (23.6%), hospice (23.0%), and outpatient/clinic settings (19.9%).

EOL EDUCATION

Evaluation Question 1: Content Adequacy of Course Curriculum

Table 2 presents data from the participants' perception of course curriculum/modules at 12 months after course attendance. Participants were asked to rate

TABLE 3 Number of CE/SD EOL Programs Presented

	Pre X (mean)	Post X (mean)	P value
	No. of Activities/ No. of Attendees	No. of Activities/ No. of Attendees	No. of Activities/ No. of Attendees
Nursing Care at EOL	4.38/ 53.35	5.02/ 109.71	0.743/ 0.100
Pain Management	5.72/ 81.49	4.74/ 85.21	0.484/ 0.878
Symptom Management	3.75/ 63.33	3.52/ 65.93	0.905/ 0.945
Ethical/Legal	2.29/ 43.88	4.43/ 75.31	0.168/ 0.099
Culture	1.82/ 27.34	3.26/ 48.15	0.000/ 0.002
Communication	4.37/ 63.66	3.70/ 86.33	0.736/ 0.545
Grief, Loss, Bereavement	2.74/ 29.19	3.69/ 66.43	0.043/ 0.000
Preparation and Care for Time of Death	3.55/ 20.81	3.59/ 59.50	0.963/ 0.002
Achieving Quality Care at the EOL	6.32/ 102.11	4.80/ 68.00	0.724/ 0.659
Total (mean)	34.83/ 482.09	35.86/ 654.30	

TABLE 4 Teaching ELNEC Curriculum Outside of Institution/Agency

Have you or your colleagues used the ELNEC curriculum to teach healthcare related professionals other than those in your program/agency?	
No = 110, 50.7%	
Yes = 107, 49.3%	
If yes, estimate number of nurses and/or non-nursing healthcare professionals receiving EOL education based on the ELNEC curriculum according to the site of the teaching?	
Site	Mean/SD
Nursing Programs	50.37/86.90
Clinical Settings	110.13/228.81
CE Program/SD Activity	69.77/106.91
Other	47.68/85.71

their institutions' curriculum in nine areas that mirrored the ELNEC content on a scale of 0 = *not adequate* to 10 = *very adequate*. Post-course ratings demonstrated that participants believed their curricula were moderately adequate in EOL care with a range of 6.23–7.35 with culture as the lowest (6.23) and pain content as highest (7.35) rated. This is a positive finding, particularly given the many constraints on educational budgets, as well as the nursing shortage. The change is particularly notable given the fact that these changes occurred within the first 12 months of course attendance.

Evaluation Question 2: How many CE/SD programs have been provided related to the ELNEC modules after educators participated in ELNEC?

Using the nine ELNEC modules, nursing educators were asked to document the number of activities and attendees who had received lectures or other educational content based on the ELNEC curriculum. Although the number of activities related to educating nurses within these nine modules remained about the same, the number of attendees was significantly higher post-course (see Table 3). The only module that had more attendees pre-ELNEC course than post-ELNEC course was "Achieving Quality Care at the End of Life." This may be because of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) pain standards prompting pain education nationwide and hence nurses attributing better pain assessment/management and symptom management (e.g., dyspnea, constipation) with improved quality of care. Attendance in courses increased over 100% in three

areas post-course including nursing care at the end of life; loss, grief, bereavement; and preparation for and care at the time of death.

Evaluation Question 3: Teaching ELNEC Curriculum Outside the Participant's Institution/Agency

One year after completing the ELNEC course, 107 (49.3%) CE/SD ELNEC train-the-trainer participants also reported implementing the curriculum outside of their institutions/agencies. Most of this training took place in clinical settings, followed by CE program/SD programs (see Table 4). With the many responsibilities of CE providers/SD educators in their institutions such as addressing quality improvement issues, orienting new nurses, overseeing internship and residency programs, and providing educational programs for clinical staff, it is impressive that nearly 50% of the participants implemented the ELNEC curriculum outside their own institutions.

Evaluation Question 4: Materials Added to Teach EOL Content

Educators reported that they added materials to assist with their EOL teaching (see Table 5). Prior to attending the ELNEC course, the educators relied primarily on lecture whereas post-ELNEC attendance they were able to use diverse methods provided through the ELNEC training program. The sensitivity of education in EOL care and the need to use diverse teaching methods are crucial to successful education. The number of external speakers decreased post-ELNEC course as these educators were prepared to teach EOL content.

TABLE 5 Methods Used to Teach EOL Content

Materials	Pre X, N (% of Cases)	Post X, N (% of Cases)
Textbooks	91 (50%)	79 (40.3%)
Computer-assisted instruction	19 (10.4%)	39 (19.9%)
Audiovisuals	84 (46.2%)	98 (50.0%)
Speakers, experts	116 (63.7%)	92 (46.9%)
Clinical sites	89 (48.9%)	40 (20.4%) new sites
EOL lecture guides/outlines	58 (31.9%)	161 (82.1%) ELNEC
Case studies	59 (32.4%)	125 (63.8%) ELNEC
Internet resources	51 (28.0)	77 (39.3%)

TABLE 6 Perceived Status of EOL Education, N = 227

Item	Pre X	Post X	t Tests
Importance of EOL content to basic education	9.58	9.72	-2.354
Effectiveness of new graduates/staff in care of the dying	5.65	7.26	-10.301
Receptiveness of faculty to increased EOL content	8.79	8.01	4.602
Effectiveness of your own teaching in EOL care	6.77	7.99	-6.412
Effectiveness of overall curriculum in EOL care	5.85	7.10	-5.060
Helpfulness of the ELNEC course	-	9.03	-

On a scale of 0 = negative to 10 = positive.

Evaluation Question 5: Perceived Status of EOL Education

Table 6 depicts results regarding the participants' perceptions of the status of EOL education in their institutions/organizations. Overall, this was an "already converted" group as they believed, even prior to attending the course, that EOL content is very important. In the 12-month post-course evaluation, participants reported significant improvement in the effectiveness of staff, their own teaching, and their overall curriculum in EOL care. Overall, the educators rated the helpfulness of the ELNEC curriculum at 9.03 (on a scale of 0 = *not helpful* to 10 = *very helpful*).

SUMMARY

The ELNEC project provides continuing support for the CE providers and SD educators who participated in the train-the-trainer program. On a quarterly basis, each trainer receives an electronic copy of the *ELNEC Connections*, a newsletter that informs him/her of upcoming EOL courses and conferences, as well as sharing information on what other trainers are doing around the country. The ELNEC Web site is also an excellent way for the trainers to stay connected to the project. In addition, the Web site provides a directory of other ELNEC trainers by state. The trainers have stated that this has been very helpful in locating other trainers who might assist them with teaching ELNEC at their facility. Because new laws, statutes, medications, and so on are constantly changing, it is important that

the ELNEC trainers have the ability to provide the most up-to-date information. Therefore, trainers may purchase new CD-ROMs and/or hard-copy syllabuses on an annual basis.

The ELNEC project has been an extremely successful educational endeavor to improve knowledge by nurses in EOL care. Data suggest that nurses are very receptive to EOL education and are productive in implementation of course goals and objectives. In addition, many educators are teaching the ELNEC content outside of their own institutions/agencies, and they are expanding the materials used in their educational efforts. Most importantly, these educators have reported that they are more effective in teaching EOL care because of the ELNEC curriculum and its impact on better quality care of the dying and their families.

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