



All Theses and Dissertations

2011-07-14

The Last Frontier: Rural Emergency Nurses' Perceptions of End-of-Life Care

Virginia Claudia Giles
Brigham Young University - Provo

Follow this and additional works at: <https://scholarsarchive.byu.edu/etd>



Part of the [Nursing Commons](#)

BYU ScholarsArchive Citation

Giles, Virginia Claudia, "The Last Frontier: Rural Emergency Nurses' Perceptions of End-of-Life Care" (2011). *All Theses and Dissertations*. 2815.

<https://scholarsarchive.byu.edu/etd/2815>

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

The Last Frontier: Rural Emergency Nurses'
Perceptions of End-of-Life Care

Virginia Giles

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Nursing

Renea L. Beckstrand, chair
Lynn C. Callister
Karlen E. Luthy

College of Nursing
Brigham Young University
August, 2011

Copyright © 2011 Virginia Giles

All Rights Reserved

ABSTRACT

Virginia Giles
College of Nursing, BYU
Masters of Nursing

Introduction: Caring for dying patients is part of working in a rural emergency department. Rural emergency nurses are prepared to provide life-saving treatments but find there are barriers to providing end-of-life (EOL) care. This study was completed to discover what the size, frequency, and magnitude of obstacles were in providing EOL care in rural emergency departments as perceived by rural emergency nurses.

Methods: A 58-item questionnaire was sent to 52 rural hospitals in Idaho, Wyoming, Utah, Nevada, and Alaska. Respondents were asked to rate items on size and frequency of perceived barriers to providing EOL care in rural emergency departments. Results were compared with results from two previous emergency nurses' studies to determine if rural nurses had different barriers to providing EOL care.

Results: The top three perceived obstacles by rural emergency nurses were: 1) family and friends who continually call the nurse wanting an update on the patient's condition rather than calling the designated family member; 2) knowing the patient or family members personally, and 3) the poor design of emergency departments which do not allow for privacy of dying patients or grieving family members. The results of this study differed from the other two previous studies of emergency nurses.

Discussion: Nurses in rural emergency settings often work in an environment without many support personnel. Answering numerous phone calls removes the nurse from the bedside of the dying patient and is seen as a large and frequent obstacle.

Personally knowing either the patient or members of the family is a common obstacle to providing EOL care in rural communities. Rural nurses often describe their patients as family members or friends. Caring for a dying friend or family member can be intensely rewarding, but can all so be very distressing.

Conclusion: Rural emergency nurses live and work on the frontier. Little EOL research has been conducted using the perceptions of rural emergency nurses possibly because of the difficulty in accurately accessing this special population of nurses. Rural emergency nurses report experiencing both similar and different obstacles as compared to their counterparts working in predominately urban emergency departments. By understanding the obstacles faced by emergency nurses in the rural setting, changes can be implemented to help decrease the largest barriers to EOL care which will improve care of the dying patient in rural emergency departments. Further research is also required in the area of rural emergency nursing and in EOL care for rural patients.

Keywords: End-of-life care, rural, emergency departments

ACKNOWLEDGEMENTS

I would like to thank Dr. Renea L. Beckstrand for all of her help and encouragement with this work. I would also like to thank my family for their love and support. I would also like to thank Sherri Sagers for her help with editing and organization.

The Last Frontier: Rural Emergency Nurses'

Perceptions of End-of-Life Care

Death is an inevitable part of mortality; it can be a sudden, unpredictable event, as in the case of cardiac arrest, or it can be an expected event as in advanced age or terminal illness. Caring for dying patients is common in an emergency department (ED)¹ and is one of the most demanding responsibilities of a nurse.² In 2008, there were 139,000 patient deaths in emergency departments in the US. This accounted for approximately 0.1% of all ED patient visits.³ Emergency nurses are prepared to provide lifesaving treatments but find barriers to providing end-of-life (EOL) care.

EOL care is designed specifically to alleviate patients' pain and suffering in the final stages of dying, when comfort becomes the main focus.⁴ Perceptions of a "good death" include the idea that the patient is comfortable and free of pain, the family is able to perform EOL rituals, others are respectful of the patient's dignity, and families have adequate time to say goodbye.⁵ The EOL experience can be enhanced by eliminating distracting activity and noise to create a quiet calm atmosphere for the patient and family.⁴ This is often difficult in a busy emergency department. Providing EOL care to chronically ill or terminally ill patients is challenging for emergency nurses because the focus of emergency resources is saving lives, not preserving dignity⁶ or providing EOL care. The model of rescue-oriented rather than dignity-preserving care has become the expectation in emergency departments. Successful heroic measures are seen by patients and families as the norm, and EOL care and comfort plans are rarely addressed.⁷

Nationally, nursing organizations have recognized the importance of providing competent care to dying patients. The American Nurses Association (ANA) states that nurses have an

ethical and moral obligation to relieve suffering and provide comfort to patients at the EOL.⁸ Similarly, the Emergency Nurses Association (ENA) states that every patient at the EOL deserves a dignified death.⁹ Emergency nurses have tremendous opportunities to impact EOL care regardless of location, size, or hospital affiliation.¹⁰ Understanding the barriers that prevent nurses from providing quality EOL care in emergency settings is crucial to providing the best care possible.

Barriers to Providing EOL Care

The barriers preventing emergency nurses from providing EOL care to dying patients generally fit into three major categories: 1) misperceptions about realistic ED outcomes, 2) the ED environment and, 3) EOL educational resources.

Misperceptions about realistic ED outcomes. Patients and families have unrealistic expectations of positive outcomes. These unrealistic expectations are cultivated and reinforced by media portrayal of miraculous emergency care provided to dying patients which contributes to the perception that most ED deaths are preventable. The portrayal of extraordinary abilities in emergency departments combined with reports of unprecedented technological advances contributes to the general perception that most ED deaths are preventable.

The ED environment. Unfortunately, the emergency department is not typically conducive to providing quality EOL care.¹¹ Frequent environmental barriers include constant patient turnover, limited available space, and the hectic and noisy atmosphere.¹¹

EOL educational resources. Researchers have analyzed nursing textbooks for EOL care education and found that in 50 of the top selling nursing textbooks only 2% of content was dedicated to EOL care. Furthermore, the quality of EOL content in these textbooks was poor.¹² Without quality resources it is, therefore, not surprising nurses feel inadequately prepared.

EOL Care in Rural Emergency Departments

The task of providing EOL care impacts emergency nurses in rural locations as much or more as their urban counterparts since there are extensive numbers of people living in rural areas. Nearly 50 million Americans (17% of the population) live in rural areas in the US.¹³ Thirty-one of the 50 states have more than 60% of their counties designated as rural with rural residents residing across 80% of the land area.¹³

In 2008, the American Hospital Association determined that 1,998 rural hospitals provided care to local residents with 60% of these hospitals further designated as Critical Access Hospitals (CAHs). CAHs have been designated by state and federal governments to receive Medicare reimbursement to meet the needs of rural populations.¹⁴ To be a designated CAH, the hospital facility must meet specific guidelines determined by the federal government (see Table 1).

The National Institutes of Health (NIH) and National Institute of Nursing Research (NINR) have identified EOL and palliative care in rural and frontier areas a priority area of research and funding.¹⁵ However, little is known regarding EOL care provided to emergency department patients in rural settings.¹⁵ The purpose of this study is to determine the barriers to rural emergency EOL care as perceived by rural nurses working in the Intermountain West and Alaska.

Research Questions

Specifically, this study asks:

1. What are the size, frequency, and perceived magnitude scores of selected obstacles in providing EOL care in rural emergency departments as perceived by rural emergency nurses?

2. Do the size, frequency, and perceived magnitude scores of these obstacles for nurses providing EOL care in rural emergency departments differ from urban emergency nurses?

Methodology

Computer searches were done on Premier, CINAHL, Health Source, Nursing/Academic Edition, MEDLINE, and PsychINFO using the following qualifiers: human studies, English language, peer reviewed, and research studies. With these qualifiers, the terms rural emergency department EOL were then searched. Initially, the research material date was limited to the years 2003 - 2009, but no data were available with that time period. The search was repeated without a date limitation using the same qualifiers and search terms and again no data were available on barriers to providing EOL care in rural emergency departments.

According to the 2010 census data, the most rural areas in the US by population densities per square mile are presented in Figure 1.¹⁶ To contact rural emergency nurses in some of these states, it was determined that nurses working at CAHs should be contacted because CAHs are only found in small rural communities.

States selected were in the Intermountain West and Alaska because of the number of CAHs available. With Institutional Review Board (IRB) approval, ED managers in 73 CAHs in the Intermountain West (UT, ID, NV, and WY) and AK were contacted by phone. Detailed phone messages were left for managers who could not be reached, to as many as four times. Questionnaire packets were mailed to each ED manager with a cover letter explaining the purpose of the study, a consent form, a questionnaire, return envelope, and a one dollar bill as a thank you for the nurse's time and quick return of the completed questionnaire. The nurse manager or ED representative was asked to distribute the survey questionnaires to their nursing

staff. No nurse was obligated to complete the questionnaire. Return of the questionnaire was deemed as consent to participate. Out of the 73 CAHs contacted, one nurse manager refused to participate.

Instrument

The *Rural Emergency Nurse's Perception of End-of-Life Care* questionnaire was adapted from other questionnaires used in EOL studies conducted by Beckstrand and associates.¹⁷ These two previous emergency EOL studies did not designate whether nurses in the sample worked in rural or urban emergency department, but the average emergency bed number in both studies were greater than any CAHs total bed number implying that the previous samples did not include a majority of rural emergency nurses.

The 58-item questionnaire was adapted to focus on a rural emergency perspective by utilizing previous research in rural palliative care¹⁸ and expert opinion. The questionnaire was piloted by 15 nurses in two CAH emergency departments in Utah. Participants of the pilot questionnaire provided feedback on questions, content, and estimated completion time. Completion time was between 20 to 30 minutes. The questionnaire consisted of 40 Likert-type items, 3 open-ended narrative questions, and 15 demographic questions.

Seventy-one percent of the CAHs (52 of the 73 rural hospitals) in these five states consented to participate in the study (see Table 2). The return rate was 46.4% or 236 of the 508 questionnaires mailed and included questionnaires completed by five licensed practical nurses (LPNs) and 3 paramedics. Data from LPNs and paramedics were included since rural facilities often hire licensed personnel other than RNs. Returned questionnaire data were entered into IBM® SPSS®¹⁹. All responses were then evaluated and analyzed.

Subjects were asked to rank all obstacle items for both size and frequency. The scale for obstacle size was from 0 (not an obstacle) to 5 (extremely large obstacle). A comparable scale for frequency of occurrence was used with 0 (never occurs) to 5 (always occurs). A rating of the obstacle's magnitude or significance was calculated by multiplying each obstacle's mean score by the obstacle's mean frequency score²⁰ to obtain a Perceived Obstacle Magnitude Score (POMS).

Results

Of the 236 subjects who returned the questionnaire, 204 (86.4%) were female and 32 (13.6%) were male. The average age of subjects was 46 years. RNs who responded had been practicing for an average of 15.3 years and had worked in the emergency department for an average of 11.2 years. Other demographic data is shown in Table 3.

The POMS for all obstacle items ranged from a high of 9.28 to a low of 1.98 (see Table 4). Items were ranked by their mean scores to three decimal places; however, scores were reported to two decimal places accounting for the appearance of tied mean numbers. The top five highest perceived obstacles were, in descending order: 1) Family and friends who continually call the nurse wanting an update on the patient's condition rather than calling the designated family member for information (POMS = 9.28); 2) Knowing the patient or family members personally (POMS = 9.03); 3) Poor design of emergency departments, which do not allow for privacy of dying patients or grieving family members (POM = 8.94); 4) Family members not understanding what "lifesaving measures" really mean, i.e., that multiple needle sticks cause pain and bruising, that an ET tube won't allow the patient to talk, or that ribs may be broken during chest compressions (POMS = 8.17); and 5) Patient care being fragmented in the rural ED because the nurse is required to fill many roles other than nursing (POMS = 7.88).

Other top ten items included two items where the nurse had to deal with either distraught (POMS = 7.24, 8th) or angry family members (POMS = 6.92, 10th) or the nurse not having enough time to provide quality EOL care due to being consumed with activities that are attempting to save the patient's life (POMS = 6.98, 9th). The remaining top 10 items dealt with issues of resources and environment such as not having resource teams such as social workers or chaplains available to help with EOL care (POMS = 7.66, 6th) or the emergency department not being designed to provide EOL care (POMS = 7.29, 7th).

The three lowest scoring POM obstacles were, in ascending order: Pressure to limit family grieving after the patient's death to accommodate a new admit to that room (POMS = 1.98, 39th); the nurse not being comfortable caring for dying patients and/or their families (POMS = 2.87, 38th); and, the nurse's opinion about the direction of patient care is not requested, not valued, or not considered (POMS = 2.88, 37th).

Discussion

The item that rural nurses identified as their greatest obstacle to providing EOL care was family and friends who continually call the nurse wanting an update on the patient's condition. This obstacle also scored as the largest item in two other critical care EOL studies.^{5, 22} However, in two ED studies,^{17, 21} this item regarding answering telephone calls was ranked as the 6th largest obstacle. For the critical care nurse samples, this item was highly rated because continual phone calls from family and friends took the nurses away from being at the bedside providing care. For rural emergency nurses, both being removed from directly caring for the patient and the possibility of have less support staff to answer numerous phone calls could be the reasons nurses ranked this item high.

The second largest barrier to providing EOL care occurs when the nurse knows the patient or family personally. In small communities, close relationships with patients frequently exist outside the hospital. In many cases, nurses are called on to give care to patients, friends, and neighbors after discharge because the rural emergency nurses lives in the same community.²³ Rural nurses often describe their patients as family members or friends.²³ Caring for a dying friend or family member can be intensely rewarding, but it can also be very distressing.¹⁸

The barrier listed as 4th in this study and 3rd and 4th in two previous emergency department studies^{17, 21} was that family members do not understand what “lifesaving measures” really means. For example, family members frequently are unaware that multiple needle sticks will be required even though they cause pain and bruising, that an ET tube will not allow the patient to talk, or that ribs may be broken during chest compressions. Unfortunately the patient’s family often does not understand that lifesaving interventions usually means additional pain and suffering for the patient.⁵

Design

Design issues also prevent rural emergency nurses from providing EOL care. Poor department design was among the top three barriers to providing EOL care in both previous studies.^{17, 21} Based on these responses of rural emergency nurses, poor design of emergency departments was identified as the 3rd most significant barrier. The EOL experience is enhanced by eliminating distracting activity and noise and creating a quiet calm atmosphere.⁴ Having an adequate place for family members to sit together, grieve privately, or cry is very important although rural emergency departments often lack these accommodation which might account for nurses scoring poor design as a significant obstacle to providing EOL care.

Resources

Caring for patients with chronic conditions requires a different nursing skill-set than caring for a trauma victim.¹⁰ Nurses often feel inadequately prepared to care for terminally ill or dying patients either because they lack resources or have not received adequate education in EOL care.⁶ Providing EOL care to dying patients in any emergency department can be difficult, but for emergency nurses in rural communities it is even more challenging. Rural emergency nurses must often make difficult decisions with insufficient or non-existent resources.²³

The most significant resource issue for rural emergency nurses was the many roles they are required to fill resulting in fragmented patient care. Fragmented patient care was identified as the 6th most significant obstacle. Rural nurses have been described as “specialized generalists” because of the necessity to be competent in a wide range of nursing and non-nursing roles.²⁴ In addition to the typical nursing duties, rural nurses are also required to answer telephones, make arrangements for specialists to see patients, and clean rooms. These additional duties interrupt care nurses provide to dying patients.

Another significant but unique barrier for the rural nurse is the lack of support teams for family members. This barrier was identified as the 6th most significant issue for rural nurses even though it was ranked lower in both of other emergency nurse studies.^{17, 21} Having a social worker or religious leader help with family members during a patient resuscitation can greatly reduce the stress of the event for the nurse.⁴ The presence of additional licensed professionals allow the nurse to completely focus on providing care to the patient. Sparsely staffed hospitals can only pool the resources they have available when a critical or dying patient arrives. The job of caring

for dying patients is challenging in any emergency department; in this high intensity situation extra resources can reduce the stress and give time to provide EOL care.

One difference in obstacle ranking between this study and previous studies^{17, 21} was emergency nurses reported having too high a work load to care for dying patients as the number one obstacle. In this study this item dropped to 14th probably due to the fact that in busy emergency departments, rapid patient turnover becomes a prominent barrier to providing EOL care. However, while patients may also be waiting in the rural ED setting, the rural nurse does not feel as pressured to rush EOL care. This attitude of having time for EOL being lower ranked barriers in rural settings was also reflected in the lowest rated item (39th) being pressure to limit family grieving after death to accommodate a new admit.

Limitations

A limitation of this study is that the sample was not selected randomly, but was a convenience sample of nurses from selected CAHs. While the sample was not random, the response rate of 47% was good and therefore, the results can be generalized to rural nurses working in CAHs in selected states. Another potential limitation was that health care providers, other than RNs, completed the questionnaire and were included in the study. This limitation is believed to be minor is that there were very few non-RN participants included.

Conclusion

Rural emergency nurses live and work on the frontier. Little EOL research has been conducted using the perceptions of rural emergency nurses possibly because of the difficulty in accurately accessing this special population of nurses. Rural emergency nurses report experiencing both similar and different obstacles as compared to their counterparts working in predominately urban emergency departments. By understanding the obstacles faced by

emergency nurses in the rural setting, changes can be implemented to help decrease the largest barriers to EOL care which will improve care of the dying patient in rural emergency departments. Further research is also required in the area of rural emergency nursing and in EOL care for rural patients.

References

1. Edwards, K. D. (2003). Death in the emergency department: a not so absolutely ordinary rainbow. *The Medical Journal of Australia*, 179(11/12), 647-648. Retrieved from <http://www.mja.com.au/public/issue/179>
2. Rushton, C. H., Spencer, K. L., & Johanson, W. (2004). Bringing end-of-life care out of the shadows. *Holist Nursing Practice*, 18(6), 313-317.
3. Niska, R., Bhuiya, F., & Xu, J. (6). National hospital ambulatory medical care survey: 2007 emergency department summary. *National Health Statistics Reports*, , . Retrieved from U.S. Department of Health and Human Services Center for Disease Control and Prevention. <http://www.cdc.gov/nchs/data/nhsr/nhsr026.pdf>
4. Field, S. (2006). End-of-life care in Emergency Departments. *Israeli Journal of Emergency Medicine*, 6(2), 22-28.
5. Crump, S. K., Schaffer, M. A., & Schulte, E. (2010). Critical care nurses' perceptions of obstacles, supports, and knowledge needed in providing quality end-of-life care. *Dimensions of Critical Care Nursing*, 29(6), 297-306.
doi:10.1097/DCC.obo13e3181foc43
6. Utton, T. (17th). *The University of Nottingham*. Retrieved May 13, 2011, from <http://www.nottingham.ac.uk/new/pressrelease/2010/december/accidentandemergency.as>
from [http:// www.aha.org/aha/resource-center/Statistics-and-Studies/fast-facts/html](http://www.aha.org/aha/resource-center/Statistics-and-Studies/fast-facts/html)
7. Chan, G. K. (2004). End-of-life care models and emergency department care. *Academic Emergency*, 11(1), 79-86.

8. American Nurses' Association. (1991). Retrieved February 18, 2010, from <http://nursingworld.org/MainMenuCategories/EthicsStandards/IssuesUpdate>
9. Emergency Nurses' Association. (2002, September). Retrieved February 18, 2010, from <http://ena.org>
10. McClain, K., & Perkins, P. (2002). Terminally ill patients in the Emergency Department: a practical overview of end-of-life issues. *Journal of Emergency Nursing*, 28(6), 515-522. doi:10.1067/men.2002.129825
11. Iglesias, M. L., & Echarte Pazos, J. L. (2007). Medical and nursing care for patients expected to die in the Emergency Department. *Emergencias*, 19, 201-210. http://www.semes.org/revista/vol19_4/6_ing.pdf
12. Rabow, M. W., McPhee, S. J., Fair, J. M., & Hardie, G. E. (1999). A failing grade for end-of-life contents in textbooks: what is to be done? *Journal of Palliative Medicine*, 2, 153-155. doi: abs/10.1089/jpm.1999.2.153
13. Cromartie, J. (2009, September 30). Rural population and migration. , , . Retrieved from United States Department of Agriculture Economic Research Service. <http://www.ers.usda.gov/Briefing/Population/>
14. Reinertson-Sand, M. (26). Retrieved July 9, 2010, from <http://www.flexmonitoring.org/cahlistRA.cgi>
15. Chan, G. K. (2006). End-of-life and palliative care in the emergency department: A call for research, education, policy and improved practice in this frontier area. *Journal of Emergency Nursing*, 32(1), 101-103. doi:10.1016/jen.2005.10.006

16. Rural Assistance Center. The University of North Dakota Center for Rural Health School of Medicine and Health Sciences. Room 4520.
17. Beckstrand, R. L., Smith, M. D., Heaston, S., & Bond, A. E. (2008). Emergency nurse's perceptions of size, frequency, and magnitude of obstacles and supportive behaviors in end-of-life care. *Journal of Emergency Nursing*, 34(4), 290-300.
doi:10.1016/j.jen.207.09.004
18. Niemira, D., & Townsend, T. (2009). Ethics conflicts in rural communities: End-of-life decision-making. In W.A. Nelson (Ed.), *Handbook for rural health care ethics: A practical guide for professionals* (pp. 209-230). Hanover, NH: Trustee of Dartmouth College. <http://dms.dartmouth.edu/cfm/resources/ethics/chapter-11.pdf>
19. IBM® SPSS®, (2009). Corporate headquarters: IBM Corporation, 1 new Orchard Road, Armonk, New York.
20. Swatzky, J. V. (1996). Stress in critical care nurses: Actual and perceived. *Heart and Lung*, 25(5), 409-417.
21. Heaston, S., Beckstrand, R., Bond, E., & Palmer, S. (2006). Emergency nurses' perceptions of obstacles and supportive behaviors in end-of-life care. *Journal of Emergency Nursing*, 32(6), 477-485.
22. Beckstrand, R. L., & Kirchhoff, K. (2005). Providing End-of-Life Care to Patients: Critical Care Nurses' Perceived Obstacles and Supportive Behaviors. *American Journal of Critical Care*, 14(5), 395-403. Retrieved from <http://ajcc.aacnjournals.org/content/14/5/395.fullhttp>

23. Bushy, A. (1998). International perspective: Rural nursing in the United States: Where do we stand as we enter a new millennium. *The Australian Journal of Health*, 6(2), 65-71. doi:10.1111/j.1440-1584.1998.tb00286.x
24. Hegney, D. (1996). The status of rural nursing in Australia: A review. *Australian Journal of Rural Health*, 4, 1-10. doi:10.1111/j.1440-1584.1996.tb00180.x

Table 1*Critical Assess Hospital Criteria*

Critical Assess Hospital (CAH) Criteria ¹⁶	
1.	Is located in a state that has established with Center for Medicare and Medicaid Services a Medicare Rural hospital flexibility program
2.	Has been designated by the State as a CAH
3.	Is currently participating in Medicare as a rural public, non-profit or for-profit hospital; or was a participating hospital that ceased operation during the 10-year period from 11/ 29/1989 to 11/29/1999; or is a health clinic or health center that was downsized from a hospital
4.	Is located in a rural area or is treated as rural
5.	Is located more than 35-mile drive from any other hospital or CAH (in mountainous terrain or in areas with only secondary roads available, the mileage criterion in 15 miles)
6.	Maintains no more than 25 inpatient beds
7.	Maintains an annual average length of stay of 96 hours per patient for acute inpatient care
8.	Complies with all CAH Conditions of Participation, including the requirement to make available 24-hour emergency care services 7 days per week.

Table 2*Questionnaires Returned by State*

State	Questionnaires returned/ State n = x (%)
Idaho	112 (47.5)
Wyoming	57 (24.1)
Utah	29 (12.3)
Nevada	21 (8.9)
Alaska	17 (7.2)
Total	236 (100)

Table 3
Demographics

Demographics of Nurses. N = 508, Returned 236 = 46.4% response rate.			
Characteristics			
Sex	<u>n</u>	<u>%</u>	
Female	204	(86.4)	
Male	32	(13.6)	
	<u>M</u>	<u>SD</u>	<u>Range</u>
Age	46	10.1	24 - 71
Years as RN	15.3	11.0	0 - 50
Years in ED	11.2	9.3	<1 - 41
Years in Rural Nursing	10.5	9.1	<1 - 41
Hours worked/week	32.0	12.2	0 - 80
Number of beds in ED	6.5	4.7	2 - 25
Dying patients cared for:		<u>%</u>	
>30		36.2	
21 - 30		12.9	
11 - 20		17.4	
5 - 10		19.6	
<5		13.8	
Highest degree:		<u>%</u>	
Diploma		4.0	
Associate		57.2	
Bachelor		32.2	
Master		5.3	
Other		1.3	
Ever certified as CEN	<u>n</u>	<u>%</u>	
Yes	36	(16.0)	
No	188	(83.6)	
Currently CEN	<u>n</u>	<u>%</u>	
Yes	27	(44.3)	
No	33	(54.1)	
Years as CEN	5.7	5.4	0 - 20
Practice area:		<u>%</u>	
Direct Care/Bedside Nurse		36.9	
Staff/Charge Nurse		46.2	
Clinical Nurse Specialist		0.9	
Other (Manager, Educator, etc.)		16.0	

Table 4

Size Mean, Standard Deviation, and Rank; Frequency Mean, Standard Deviation, and Rank; and Perceived Obstacle Magnitude Score (POMS) for Obstacles at End-of-Life Care

Obstacles	Size <u>M</u>	Size <u>SD</u>	Size Rank	Freq <u>M</u> ^{**}	Freq <u>SD</u>	Freq Rank	POMS ^{***}
1. Family and friends who continually call the nurse wanting an update on the patient's condition rather than calling the designated family member for information.	3.21	1.20	2	2.89	1.15	2	9.28
2. Knowing the patient or family members personally.	2.85	1.43	14	3.17	1.13	1	9.03
3. Poor design of emergency departments which do not allow for privacy of dying patients or grieving family members.	3.24	1.40	1	2.76	1.31	3	8.94
4. Family members not understanding what "life-saving measures" really mean, i.e., that multiple needle sticks cause pain and bruising, that an ET tube won't allow the patient to talk, or that ribs may be broken during chest compressions.	3.18	1.18	4	2.57	1.07	6	8.17
5. Patient care being fragmented in the rural ED because the nurse is required to fill many roles other than nursing.	3.03	1.42	7	2.60	1.35	4	7.88
6. The availability of resource teams (social workers, chaplains) to help with EoL care.	2.97	1.39	9	2.58	1.35	5	7.66

Obstacles	Size <u>M</u>	Size <u>SD</u>	Size Rank	Freq <u>M</u> ^{**}	Freq <u>SD</u>	Freq Rank	POMS ^{***}
7. The ED not designed to provide EoL care.	3.00	1.44	8	2.43	1.33	8	7.29
8. The nurse having to deal with distraught family members while still providing care for the patient.	2.86	1.09	13	2.53	0.93	7	7.24
9. Not enough time to provide quality end-of-life care because the nurse is consumed with activities that are trying to save the patient's life.	2.91	1.18	10	2.40	1.02	9	6.98
10. The nurse having to deal with angry family members.	3.09	1.22	5	2.24	0.94	12	6.92
11. Being called away from the dying patient and their family because of the need to help other patients.	2.87	1.28	12	2.32	1.12	10	6.66
12. Patients experiencing a sudden illness or injury which leaves them little time to discuss their wishes about what they want done at the end of life.	3.05	1.25	6	2.16 ⁺	0.97	14	6.58
13. The nurse not knowing the patient's wishes about continuing treatments and tests because of the inability to communicate due to a depressed neurological status or due to pharmacological sedation.	2.89	1.28	11	2.16	0.99	17	6.24
14. The ED nurse having too high a work load to allow for adequate time to care for dying patients and their families.	2.81	1.31	15	2.16	1.12	15	6.07

Obstacles	Size <u>M</u>	Size <u>SD</u>	Size Rank	Freq <u>M</u> ^{**}	Freq <u>SD</u>	Freq Rank	POMS ^{***}
15. The patient having pain that is difficult to control or alleviate.	2.70	1.17	16	2.11	0.89	19	5.70
16. Physicians who order unnecessary tests or procedures for dying patients just so they can say that every possibility was considered.	2.68	1.32	18	2.11	1.16	20	5.67
17. Families not accepting what the physician is telling them about the patient's poor prognosis.	2.60	1.17	19	2.17	0.89	13	5.64
18. No available support person for the family such as a social worker or religious leader.	2.59	1.45	20	2.15	1.27	18	5.57
19. Being able to immediately meet bereaved family members upon their arrival to the ED.	2.43	1.21	23	2.28	1.02	11	5.54
20. Restriction of family members in the ED room during resuscitation.	2.25	1.38	29	2.16	1.27	16	4.86
21. Caring for a dying child in the ED.	3.21	1.60	3	1.45	0.79	38	4.65
22. Intra-family disagreements about whether to approve the use of life support.	2.53	1.31	22	1.83	0.96	23	4.63
23. Being related to the patient or family member.	2.69	1.59	17	1.71	1.14	31	4.59
24. The family, for whatever reason, is not with the patient when he or she is dying.	2.39	1.14	26	1.87	0.78	21	4.47

Obstacles	Size <u>M</u>	Size <u>SD</u>	Size Rank	Freq <u>M</u> ^{**}	Freq <u>SD</u>	Freq Rank	POMS ^{***}
25. Providing treatments for a dying patient even though the treatments cause the patient pain or discomfort.	2.39	1.22	25	1.80	0.92	24	4.30
26. Physicians who avoid having conversations with family members.	2.59	1.57	21	1.64	1.12	34	4.25
27. Too many family members being allowed in the room during resuscitation.	2.40	1.43	24	1.71	1.10	30	4.10
28. Having to make the death notification to the family after the patient has died.	2.34	1.36	27	1.74	1.06	29	4.07
29. Lack of nursing education and training regarding family grieving and quality EOL care.	2.18	1.34	33	1.86	1.08	22	4.05
30. Technologic interventions are used on patients who are very unlikely to survive.	2.26	1.29	28	1.78	1.09	25	4.02
31. Use of EoL care protocols specifically written for the ED.	2.24	1.48	XX	1.76	1.45	27	3.94
32. Dealing with the cultural differences that families employ in grieving for their dying family member.	2.18	1.22	34	1.76	0.99	26	3.84
33. Physicians who won't allow the patient to die from the disease process.	2.20	1.47	30	1.64	1.10	32	3.61
34. ED patients varying in acuity so that it is difficult to discern if the patient should receive EoL care.	2.19	1.36	31	1.64	1.11	33	3.59

Obstacles	Size <u>M</u>	Size <u>SD</u>	Size Rank	Freq <u>M</u> **	Freq <u>SD</u>	Freq Rank	POMS***
35. Physicians who minimize or discourage nurses' input regarding patient care.	2.18	1.50	32	1.58	1.06	36	3.44
36. Continuing resuscitation for a patient with a poor prognosis because of the real or imagined threat of future legal action by the patient's family.	2.06	1.32	35	1.46	0.97	37	3.00
37. The nurses' opinion about the direction patient care should go is not requested, not valued, or not considered.	1.81	1.32	36	1.59	1.07	35	2.88
38. The nurse not being comfortable caring for dying patients and/or their families.	1.67	1.22	37	1.72	0.80	28	2.87
39. Pressure to limit family grieving after the patient's death to accommodate a new admit to that room.	1.66	1.39	38	1.19	0.96	39	1.98

*Size of obstacle response choices were: 0 = not an obstacle to 5 = extremely large.

**Frequency of obstacle response choices were: 0 = never occurs to 5 = always occurs.

***POM = Perceived Obstacle Magnitude Score (obstacle size M multiplied by obstacle frequency M).

+Some items were tied when rounded to the hundredth but these items were rank ordered based on number to the thousandth place.

Hospital type:	<u>%</u>	
Community, non-profit	58.5	
Community, profit	10.3	
County Hospital	28.1	
Other	3.1	

Figure 1

