

ORIGINAL PAPER

Engendering Empathy in Baccalaureate Nursing Students

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Abstract

Background: Recent nursing research suggests that empathy in nursing students actually declines as students progress through their nursing program of study; with the lowest levels of empathy observed in nursing students with the most clinical experience.

Objective: This study explored the effect of an elective nursing course about the many dimensions of human suffering on empathy in baccalaureate nursing students.

Methods: The pre-test/posttest design was repeated five times over five years.

Results: Despite previous evidence that suggests that empathy declines during nursing education, in this study undergraduate nursing students scored higher on the Jefferson Scale of Empathy, Nursing Student Version R after completing the course. In addition these positive findings were replicated consistently over a five year period. Collectively students scored about seven points higher after completing the course ($p < 0.001$).

Conclusions: In an era when communication is technologically driven, nursing curricula requirements abound, and nursing students are focused on high stakes testing, the need for nurse educators to focus on engendering empathy may be more important than ever. Excerpts and exercises from the course that may have contributed to the study findings are included.

Keywords: Empathy, suffering, nursing education, nursing students, caring, human interactions

Introduction

Evidence suggests that genuine empathy among nursing students and in nursing practice is on the decline (Ozcan, Oflaz, & Sutcu Cicek, 2010; Ward, Cody, Schaal, & Hozat, 2012). Prior to an empathy intervention, Webster (2010) also observed that nursing students were struggling with anxiety in clinical and were “not able to demonstrate empathy” (p. 91). Other pertinent issues such as technology, health information systems, and the developing nursing competencies have taken priority over fostering empathy among in nursing curricula. With the recent focus on skills, outcomes, and high technology patient interventions, teaching about the art of nursing may be dwindling (Timmins, 2011). Additionally, while many nursing curricula teach therapeutic communication skills, the emphasis is on specific behaviors and responses rather than “natural empathy” (Evans, Wilt, Alligood, & O’Neil, 1998). Nursing educators are in a key position to foster and build upon a student’s natural empathy.

Background and Literature Review

While there is a plethora of definitions and descriptions for the word “empathy,” there is no one acceptable, universal definition. Beddoe and Murphy (2004) define empathy as “...the capacity to understand and respond to client’ emotions and their experiences of illness” (p. 306). Stebnicki (2007) describes empathy as transcending, namely it is “...more than just listening, attending, observing, and responding to another person with unconditional positive regard” (p. 322). Empathy involves being present to another person in a very personal way so that there is an authentic understanding and experiencing of another’s feelings. Capturing this concept of empathy in order to observe, measure and improve it in nursing students has proven to be somewhat elusive.

One of the barriers to appreciating empathy is that nursing literature suggests there may be two types of empathy to distinguish between, that which is innate or basic, and that which is learned or trained (Evans et al. 1998; Williams & Stickley, 2010). Trained empathy behaviors, such as gentle touch or therapeutic communication, are observable in the interactions between patient and caregiver. The

nurse might say, “Tell me more about what this means to you,” or the nurse might offer a hand to hold. These behaviors are teachable and reproducible, yet may not always be perceived as genuine. Evans et al. (1998) observed that trained empathetic responses were not long lasting; one year after graduation the trained empathy levels dropped significantly. Innate, or basic, empathy is the way students think about a patient’s situation. This empathy is genuine, though may not always be communicated to the patient clearly. There is consistent agreement in the literature that basic empathy is needed for patients to feel understood and validated, and is essential in the establishment of a trusting relationship between the nurse and the patient (Brunero, Lamont & Coates, 2010; Vanlaere, Coucke, & Gastmans, 2010; Williams & Stickley, 2010; Sealy, 2011; Stanley & Hurst, 2011). Based on these assertions, it is the responsibility of educators to foster development of empathy among nursing students.

The concept of empathy can be addressed and influenced by nurses in their role as educators. Although Evans et al. (1998) argue that basic empathy cannot be directly taught, they do suggest empathy can be “identified, reinforced, and refined to develop expertise” (p. 458). Furthermore, Brunero et al. (2010) conclude that it is possible to increase a nurse’s empathetic ability. Within nursing literature, there are several strategies studied to promote empathy such as storytelling, self-reflection, writing, mindfulness meditation, and experiential learning (Beddoe & Murphy, 2004; Brunero et al., 2010; Moore & Hallenbeck, 2010; Stanley & Hurst, 2011). While Ward et al. (2012) argue that empathy is difficult to learn without having experienced caring for a patient who is suffering, there are several teaching strategies that show promise in increasing basic empathy. However, no study to date has shown a consistent and repeated increase in empathy with any single educational intervention.

Hypothesis

The purpose of this study was to identify changes in students’ empathy scores as measured by the Jefferson Empathy Scale-Student Nurse Version following participation in the one semester course “Understanding Suffering.” In addition the study sought to see if the changes in empathy that were

observed once, would be consistently reproducible with several groups of students over time. Although the course that was used as the study intervention was intended to examine the concept of patient suffering, the content and assignments of the course require students to examine what the experience of suffering entails. Therefore, it was hypothesized that the course would increase levels of empathy among the student participants.

Methodology

This pretest – posttest study design was repeated with five groups of students over a five year period. Each group of students served as their own controls.

Participants

All second semester junior and senior year baccalaureate nursing students who registered for the course, Understanding Suffering, were invited to participate in this study. Data about empathy was collected from students who took the course between the years 2008 and 2012. Of the 125 students who took the course, 117 students opted to complete the empathy pre-course questionnaire, and 99 completed the post-course empathy questionnaire. Because participation was anonymous and no identifying characteristics of the participants were collected, the gender and age of the study participants is unknown. However this baccalaureate nursing program typically draws students from the Northeastern United States, and most of the upperclassmen are within the age range of 18 to 22 years old. During the study period 119 of the students who took the course were female, and six students were male.

Measurements

Levels of empathy were measured with the Jefferson Scale of Empathy (JSE). The Jefferson Scale of Empathy, Nursing Student Version R is a 20 item questionnaire in which respondents reply on 7-point Likert scale based on their personal level of agreement.

Ten of the questions are presented negatively and ten are presented positively to rid the likelihood of the respondent to repeatedly select agree (Ward et al., 2009; Yu & Kirk, 2009). The JSE was originally created to measure empathy among

physicians and has been translated into 25 different languages (Ward et al., 2009).

Both Ward et al. (2009) and Fields et al. (2011) examined the psychometrics of the adapted version of the JSE instrument for use in assessing empathy among undergraduate nursing students. Their studies of 333 nursing students and 265 nursing students, respectively, demonstrate findings which suggest that nurse researchers can utilize the JSE as adapted for nursing students with a high level of confidence. Overall, both large studies observed acceptable internal consistency and reliability, with a reliability coefficient between .77 and .89 for the nursing student version of the JSE. Therefore this is an adequate tool to assess changes in empathy among undergraduate nursing students.

Intervention

The three credit nursing elective course, Understanding Suffering, was developed to: explore the diverse aspects of suffering; identify nursing interventions that might provide comfort and meaning to patients who suffer; and acknowledge and address how nurses cope with the suffering they often witness (Kazanowski, Perrin, Potter & Sheehan, 2007). The course, which includes the topics in Perrin, Sheehan, Potter, and Kazanowski's 2012 text, *Palliative Care Nursing: Caring for Suffering Patients*, utilizes several non-traditional teaching strategies that emphasize a deep understanding of the experience of suffering, which is a precursor to empathy.

Procedures

After obtaining Institutional Review Board approval, all students who had enrolled in the elective course, Understanding Suffering, were offered the option to participate in the study. Faculty left the room while the students anonymously completed the Jefferson Scale of Empathy on both the first and last day of the four month course. Pre-course and post-course questionnaires were maintained in a sealed envelope until all course grading was completed.

Statistical Analysis

Data were analyzed with SPSS V 15 software package for Windows XP. Independent samples t-tests were utilized to compare the Jefferson

Empathy scores from pre-test to post-test since the students could not be matched individually.

Results

The results strongly support hypothesis #1 since the change in empathy scores from the beginning to the end of the course was significant for four of the five years and collectively (See table I).

In 2010 fewer students completed the posttest; this may have contributed to why the results from that

year were approaching significance, but did not reach statistical significance. When combining the statistics from 2008 to 2012, a t test revealed a statistically reliable difference between the mean pre-course empathy score ($M = 116.95, s = 9.803$) and the mean post-course empathy score ($M = 123.97, s = 7.782$), $t(214) = 5.755, p = <.001, \alpha = .05$. Overall, the data showed that empathy scores increased an average of 7.02 points from the beginning of the course to the end of the course.

Table I. Empathy Pre and Post Course Scores 2008-2012

Empathy Pre and Post Course Scores 2008-2012

	N-Pre	N-Post	Pre-course M	Post-course M	Mean Difference	T-Value	Sig. (2-tailed)
2008	26	22	114.53	122.86	8.71	3.25	.002
2009	27	22	117.52	123.50	5.98	2.31	.025
2010	20	15	116.30	121.40	5.10	1.83	.076
2011	25	24	120.36	126.13	5.77	2.53	.015
2012	19	16	116.16	125.31	9.15	2.82	.008
Combined	117	99	116.95	123.97	7.02	5.87	<.001

Discussion

While the course was not specifically designed to increase empathy, the collective experience of reading, reflecting, discussing, and eventually understanding human suffering better appears to naturally cultivate empathy in nursing students. These findings are most contrary to Ward et al. (2012), who observed the most decline in empathy among student nurses with the highest amount of clinical encounters. Hojat et al. (2009) observed a similar finding in a large sample of medical students who scored lowest in empathy during their third year of medical school when they were most engaged in clinical contact with patients. The increase in empathy observed in this current study of junior and senior nursing students coincided with their peak clinical immersion as well.

Additionally, the students in this study had a significantly higher average baseline empathy score (mean pre-course JSE =116.95), than comparable students from a recent Australian study (mean pre-intervention JSE =107) (McKenna et al., 2012). However the baseline empathy scores in this current study were similar to JSE empathy scores of medical students who were from the

same geographical location (Chen, Pahilan, & Orlander, 2010).

The opportunity for self-growth that is cultivated by this course appears to play a role in these results. The value of self-reflection, self-awareness and emotional growth has been repeatedly associated with empathy, although to date, in an intangible way (Määttä, 2006; Brunero et al., 2010; Moore & Hallenbeck, 2010; Williams and Stickley, 2010).

Fostering self-awareness is particularly challenging given the student nurses who take this course are all young adults; many of whom may lack the varied life experiences needed to comprehend the significance of human suffering. In targeting the needs of these novice students, a significant amount of course time is dedicated to exploring the concept of and finding meaning in suffering.

Implications for Nursing

Today, nursing students are studying to be nurses in a technology focused era. In fact the adolescents entering college this year, also known as the "Millennials," have never known life without a home computer, the internet, and a cell phone

(Stricker, 2009). Now more than ever, nursing curricula must address the importance of genuine human to human interaction. With nursing faculty attempting to teach the ever-expanding list of essential nursing concepts, the time to teach caring, comfort and affective skills is narrowing.

In addition, to protect nursing students from compassion fatigue and burnout, educators have historically emphasized maintaining professional boundaries. However, Määttä (2006) argues that student nurses need to experience closeness to patients in order to increase empathy. The intervention in this study, a course about human suffering, uses a variety of learning strategies to develop the affective domain of nursing - an art at risk for loss in this age of informatics.

After students participated in the undergraduate nursing elective course, Understanding Suffering, a significant increase occurred in the level of empathy among participants. In order to assist educators who wish to replicate these findings in their own nursing programs, a sampling of the teaching strategies from the course that targets the development of empathy will be included here.

Being present in the moment: Guided imagery exercise. Among the many nursing interventions to address suffering, several complementary therapies are examined in the course. One therapy that requires minimal training is guided imagery. The use of guided imagery is discussed as a relaxation strategy that may be appropriate for patients who are suffering with anxiety, discomfort, nausea or insomnia (Perrin et al., 2011). One example of guided imagery included in the course text requires students to imagine what a patient might be feeling at the end of life:

Close your eyes and imagine, if you will for a moment, that you are at the last stage of your life. Let me set the scene for you. You are at home, in your own bed, surrounded by loved ones. You have said your goodbyes; all of your business is in order. Quiet surrounds you. You can smell the fresh-cut lilacs from your garden at your bedside. The air is cool and the breeze gently fans your face. You have no pain, nausea, hunger, or thirst. You are awake but drowsy and able to

communicate. Your family member holds your hand as you take your last breath. (Tyer, L. (2012). Visualization exercise for end-of life care, in Perrin, Sheehan, Potter & Kazanowski's *Palliative Care Nursing: Caring for Suffering Patients*. (pp.153). Jones and Bartlett: Burlington, MA., USA. Jblearning.com.Reprinted with permission.

Including an example of guided imagery not only affords an example of how to provide the intervention for patients, but also allows the students a momentary glance into the experience of being the recipient of care. When nursing students imagine themselves in the position of the patient, a safe opportunity for learning empathy is created.

Assuming the role of the patient: Role-playing and reflecting on case studies. One step beyond imagining oneself as a patient is the opportunity to act and respond as the patient in a simulated patient scenario. One of the five scenarios that is utilized in the Understanding Suffering course is included here:

Situation 1 - A patient who has been in the Intensive Care Unit (ICU) for 48 hours was just confirmed as having HIV, AIDs and Pneumocystis pneumonia. His significant other, who has durable power of attorney, is at his side and is distraught. Both men had an HIV test, which was negative, before they agreed to become monogamous together. Now, after seven years as a couple, not only does one partner have AIDs, but he is ventilated and extremely ill. The patient is possibly dying from pneumonia and his parents, who have never acknowledged their son's sexual preference, are on their way from the Midwest to the hospital. Role-play the conversation between the patient's partner and the nurse.

In a class focused on comfort techniques, the students are asked to role play one of five patients situations. After the scene plays out for the class, the students are encouraged to collectively reflect on the experience. Feedback from the students repeatedly focuses on how startled they are to realize the situations are based on real patient stories. Student nurses are able to briefly glimpse

and experience suffering in a safe learning setting. Several recent studies have also observed that placing the nursing student in the role of the patient in role play or case study approach is a valid way to increase empathy (Panosky & Diaz, 2009; Brunero et al., 2010; Cunico, Sartori, Marognolli & Meneghini, 2012).

Such an exercise also helps the students reflect on their own perspective, to better understand the perspective of the role they are acting.

Reflecting on and illustrating suffering through creative projects. One of the last and most substantial assignments of the elective course that may contribute to increasing empathy is a requirement that the nursing students write a paper and create a project illustrating the suffering of one of their past patients.

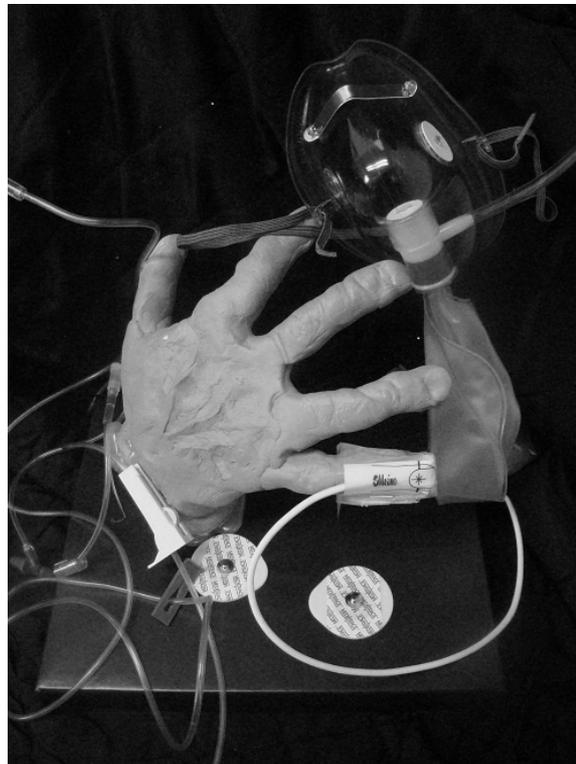
The students are instructed to choose a patient who was suffering in some way (emotionally,

physically, spiritually, etc.). Then the students reflect on their awareness of the patient's suffering and choose a creative medium to illustrate this suffering to the rest of the class. Asking students to contemplate, write about, and ultimately portray their patients' suffering clearly targets the affective domain of learning, and can place some students outside of their usual learning comfort zone. This project has taken many unique forms in the past. Some students have painted portraits, written poems, collected photos for a poster collage, created various art projects, or developed musical slideshows.

An example of one student project that demonstrated empathy was a student created model titled, "A hand to hold." This project was a model of a life-size patient hand reaching out to be held, while crowded with medical equipment such as an oxygen mask, IV tubing and cardiac monitoring supplies (See Figure I).

Figure I. Student Project: A Hand to Hold

- "Once the medical equipment was removed, I could see the patient's frail hand was available to hold, so I held it" (DiGiovine, 2011, p.3).



The student described how futile the medical equipment was as it surrounded a frail patient who was nearing the end of his life. The student nurse described the patient, "His hands were thin, fingers long, and flesh was cold. Looking at him, it looked like he knew that the end was coming, but he seemed frightened. He needed people to hold his hands and tell him that he was not alone" (DiGiovine, 2011, p.3). In addition, the student actively reflected on what the patient was experiencing,

As I saw him struggle to breathe, I remembered something he told me a few weeks prior. "You know what breathing with heart failure feels like?" He said as he choked on his own fluids, "It is like breathing through a wet washcloth." I went home after he told me that and tried to see what that felt like. I was awed at how horrible it felt. (DiGiovine, 2011, p.7).

The art of creating a project that illustrates suffering is fundamentally an exercise in empathy. Webster (2010) also observed that students who created a project that portrayed their patients in a creative medium of their own choice verbalized more understanding and attention to their patients' vulnerability. A key piece in this assignment is for the students to reflect and describe how they were feeling when they witnessed their patients' suffering. Such reflection is important in developing self-awareness. Moore and Hallenback (2010) and Stanley and Hurst (2011) also describe success using storytelling to find meaning in illness and suffering. Their narrative pedagogy has been used as a means to teach empathy. The assignment in this study is an example of how empathy may be built through creative reflection on the patient's experience. The premise and execution of the course also may play a fundamental role in developing empathy among the course participants.

Faculty intentionally share their nursing stories of "lessons learned," and openly discuss their own vulnerability and continued growth as nurses. During discussions faculty give examples of how to share a patient story and feelings openly. This faculty accompaniment in the activities of the course is paired with prioritizing time for the

students to share their stories and feelings with the class as their comfort levels allow. Indeed Williams and Stickley (2010) suggest that faculty should model empathic behavior just as much as they should teach about empathy.

Limitations.

The results of this study are not generalizable beyond the characteristics of this sample. Since the increase in empathy was observed for students who completed the entire course, it is difficult to know which specific course exercises contributed most to increasing empathy among the student participants. Additionally, the JSE is a measure of empathy attitudes and intentions, not empathetic ability. Although it might be hypothesized, it has not been established that a higher score on the JSE results in enhanced patient outcomes such as comfort and patient satisfaction. Lastly, the effects of outside influences such as other coursework, family events, and clinical experiences are not accounted for in this study.

Future research.

To determine if the course attracted students with higher empathy tendency, students from outside of the course might be used as controls. In addition, measures of class year, gender and age should be included in the data. Long term follow up with these same students would be helpful to evaluate if their levels of empathy have been sustained several months or years later. Lastly, the recent study that observed decreasing empathy levels in nursing students also included RN students returning to school to obtain their BSN (Ward et al., 2012). Since the Understanding Suffering elective course was recently opened to RN to BSN students, it would be interesting to see if the same increase in empathy is seen among this diverse group of nurse learners.

Conclusion

While the nursing elective course, Understanding Suffering, did not explicitly discuss the term empathy, many of the readings, reflections and assignments placed student nurses in situations where they had to consider the perspectives of their suffering patients; thus possibly serving as an

intervention to increase their levels of empathy. This is the first study to show an intervention for empathy that consistently increased empathy scores with different students over a five year period. Since one cannot assume that all nursing students are learning empathy in nursing curricula, nurse educators need to actively cultivate empathy. Engendering empathy is more relevant than ever in an upcoming generation of nurses raised in a technologically driven society.

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