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Comparing Perceptions of Hospice Care in Northeast Mississippi

By

Christina Lemmermann Metz

Under the direction of

Kim Whitehead

Lisa Bailey

Tammie McCoy

Sacha Dawkins

Ina E Gordy Honors College

Mississippi University for Women

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Abstract

In effort to identify a population possibly responsible for the underutilization of hospice care and services in northeast Mississippi, the student researcher compared the average perceptions among healthcare professionals and the general public. Having anticipated there was a significant difference between the averages of the two population, the student researcher tested a null hypothesis that there was no statistically significant difference between the average perceptions of hospice care among healthcare professionals and the general public in northeast Mississippi. The two 37-member sample populations were formed using convenience sampling, and were asked to complete a survey of knowledge and opinion-based questions to form a perception of hospice care. The student researcher performed a *t*-test using the average score on the “Two Cents on Hospice” surveys from each sample population to test the difference. After statistical analysis was completed, the student researcher failed to reject the null hypothesis. However, the student researcher did find statistically significant data when comparing answers between difference races and age groups of the respondents. The results of this study indicated that both healthcare professionals and the general public needed more education on what services could be offered to those who were terminally ill, as well as eligibility requirements. Recommendations were made to form sample populations using random sampling, sampling healthcare professionals and members of the general public from a larger geographical area, and asking for information to compare results of specific healthcare professions.

TABLE OF CONTENTS

Page

CHAPTER

APPENDICES

Chapter I

Origin and Statement of Problem

The modern ideation of hospice care was first introduced to the United States of America (U.S.A.) from the United Kingdom (UK) in the mid-1960s at Yale University's School of Nursing. Since its beginning, hospice care has been manipulated and regulated by the U.S.A. healthcare system to better fit the end-of-life needs of the American population. It had to be considered that the population of the U.S.A. has also changed drastically over the last half-century and has come to include more races and ethnicities than ever before (Goodwin, 2009). Hospice care in the U.S.A. has been regulated to be offered to any and all terminally ill patients with a prognosis of six months to live or less.

Goodwin (2009) explained that due to a number of possible causes, enrollment in hospice care programs has been and continues to be low with its services underused. The purpose of this research study was to survey common knowledge about and perceptions of hospice care, specifically in northeast Mississippi. In order to better identify whether hospice care is being underutilized, the student researcher planned to survey both healthcare professionals and members of the general public. The student researcher hoped to compare the knowledge and perceptions of hospice care and services between healthcare professionals and the general public as a method to determine whether there is a significant difference that could account for the underutilization of hospice services across the U.S.A.

Significance of the Problem

The purpose of hospice care has always been, and continues to be, to care for terminally ill patients (who have been given the prognosis of six months to live or less by a physician) in a way that provided comfort during the last part of their lives. All aggressive treatments were stopped once a patient enrolled into hospice care, and any treatments that continued were indicated to suppress symptoms of the terminal disease and bring comfort to the patient, as well as his or her family and loved ones (U.S. Department of Health and Human Services, 2016). The student researcher had a personal experience with hospice services prior to this study that helped her understand the significance regarding the underuse of hospice care.

If the student researcher was able to find a significant difference between the knowledge and perceptions of the two surveyed samples, the results could have encouraged further education for the sample population that exhibited the deficit. If the results of the study yielded more specific information regarding factors that would discourage enrollment into a hospice program, that proposed education could have been even more focused for the population at hand. In essence, the results of this proposed study had and still has the potential to identify and correct causes of hospice care underuse, as well as encourage further enrollment into hospice programs across northeast Mississippi and the U.S.A.

Hypotheses

Research hypothesis. There is a statistically significant difference between the perceptions of hospice care among healthcare professionals and the general public of northeast Mississippi.

Null hypothesis. There is no statistically significant difference between the perceptions of hospice care among healthcare professionals and the general public of northeast Mississippi.

Definitions

Healthcare professionals. Healthcare professionals include any professional in the medical field that could come into contact with or influence patients enrolled or eligible to enroll into a hospice care program. This includes, but is not limited to: general physicians, geriatric physicians, oncologists, family nurse practitioners, geriatric nurse practitioners, hospitalists, nephrologists, palliative care nurses, hospice nurses, registered nurses, licensed practical nurses, nursing assistive personnel, chaplains, physical therapists, respiratory therapists, case managers, and social workers.

General public. The general public includes all members of the sample population who might or might not have any previous knowledge or experience with medical care or end-of-life services, such as hospice care. This includes peoples of all races, ages, sexual orientations, faiths, socioeconomic statuses, occupations, and genders.

Hospice care. Hospice care includes a specific collection of services that were created to provide only comfort to terminally ill patients who have received a prognosis of six months to live or less and were willing to give up all aggressive end-of-life treatments (chemotherapy, tube feedings, mechanical ventilation, etc.)

Perceptions. Perceptions of both the healthcare professionals and the general public is based off of their knowledge and opinions of hospice care and its included services and benefits. These knowledge-based opinions will be measured by a Likert scale questionnaire modified by the student researcher.

Assumptions

For the purpose of the study, the student researcher made the following assumptions:

1. Healthcare providers (HCPs) have been exposed to and educated on end-of-life care and services.
2. HCPs have been made aware of the parameters for hospice care enrollment.
3. The general public has heard of and/or about hospice care.
4. The tool used to measure the perceptions was able to provide accurate measurements.
5. The study participants honestly answered the survey.

Chapter II

Introduction to Hospice

Since its introduction to the U.S.A., hospice has provided care to terminal patients and their families during the most difficult time of their lives. The goal of hospice has always been and continues to be to provide comfort to the patient and everyone else involved in the patient's decline. The U.S. Department of Health and Human Services (2016) explained that hospice agencies accomplished this as they constructed a healthcare team for each patient that included physicians, nurses, social workers, therapists, aids, counselors, and chaplains. This team provided holistic care to the patients and their loved ones for the length of their enrollment in the hospice program and thirteen months after the death of the patient (U.S. Department of Health and Human Services, 2016).

American hospice programs have offered and continue to offer incredible benefits and services to terminally ill patients. However, the rates of hospice enrollment have been and continue to be low, which has led to an increased realization that hospice in the U.S.A. has been heavily underutilized. Similarly to the country in its entirety, hospice programs and services in northeast Mississippi have also been underutilized by terminal patients. The student researcher hoped that the results of this study could lend to a better understanding of why and how this underuse has occurred.

Discrepancies in Use

Amano et al. (2014) conducted a retrospective cohort study where they interviewed 265 descendants of cancer patients who had been referred to hospice and died within their specified six-month time period. The purpose of this study was to determine if an association existed between the timing of palliative care referrals and the use of inpatient hospice services. Amano et al. (2014) determined that patients who had earlier referrals to palliative care were more likely to use those services and less likely to pursue aggressive life-sustaining treatments. The interviewees also expressed a belief that their ancestors whom were referred earlier also experienced a better quality of life (QOL) during their last months of life.

Amano et al. (2014) inferred from the results that there was a significant underutilization of hospice services within this small sample population, as well as all hospice eligible patients across the world. The sample population consisted of only 54 descendants of patients who had been referred to palliative care more than three months before their deaths and 211 descendants of patients who were referred less than or approximately three months before their deaths. If the results of this study were accurate and generalizable to the entire target population of the world, approximately 80% of hospice eligible patients would not have been referred to palliative care until they were closer than three months to their deaths. This would also mean that approximately 80% of patients, who could have benefitted from the comfort provided by hospice care, received more aggressive treatments and experienced a lower QOL during the last months of their lives (Amano et al., 2014).

Thompson, Bhargava, Bachelder, Bova-Collis, and Moss (2008) had discovered in previous research that approximately 90% of Americans expressed a desire to die at home rather than a hospital. It was also learned that only 25% or so actually did die in their homes. To further explore the discrepancy of patients not dying in their preferred setting, the research group interviewed health care professionals from 274 end-stage renal disease (ESRD) facilities about recently deceased patients. Information regarding the decision-making process of 448 deceased patients was collected for analysis.

Thompson et al. (2008) noted several discrepancies with the proper protocol for hospice-eligible patients. First of all, the results revealed that health care workers from the sampled facilities were certain that less than half of their eligible patients (48%) had a discussion about hospice care with their physician before their death. The health care workers also explained to the research group that they knew for a fact that 16% of their hospice-eligible patients had not discussed hospice care with their physician. Of the patients whom had discussed the option of hospice care, approximately 76% agreed to enroll into hospice care programs (Thompson et al., 2008).

It has already been established that hospice services provide terminal patients (including patients with ESRD) comfort care instead of aggressive treatments. As aforementioned, the use of palliative care has been associated with a higher QOL. With this information, any reader of this study could have inferred that less than half of the sampled population of recently deceased ESRD patients were known to have been granted the opportunity to reap the benefits from hospice services. Furthermore, if the results of these interviews were generalizable to the entire target population of ESRD patients, readers could have also determined that at least 16% of hospice-eligible ESRD patients would have been given no other choice than to continue their pursuit of aggressive treatments and suffer from a lower QOL (Thompson et al., 2008).

The cause of these discrepancies was and continues to be unknown. There has been research conducted on hospice referrals by physicians (and lack thereof), as well as differences of end-of-life (EOL) preferences between races in the U.S.A. This study, along with prior research has begun to explore the causes of underutilization of hospice services and care within the U.S.A.

Physician Referral

Richards and Takeuchi (2006) recognized a pattern of hospice-eligible patients having been referred to palliative care far too late in their disease process. Because hospice programs were designed to provide comfort care to terminal patients during the last six months of their lives, the median length of stay of less than one month was not long enough to reap the benefits that hospice services could have offered. The researchers also recognized that the majority of patients receiving hospice care qualified for Medicare (Part A and Part B). After analysis of financial records, it was determined that reduced frequency of hospitalizations of palliative care patients saved federal healthcare funds money (Richards & Takeuchi, 2006).

Because the researchers understood that hospice programs benefitted the patient, the patient’s family, and the U.S.A. health care system, they decided to study 58 physicians in both rural and metropolitan northern California. Richards and Takeuchi (2006) looked specifically at the physicians’ awareness of hospice services, their individual trends of referral, and their individual ranking of hospice’s importance. The research team hypothesized that increased awareness and perceived importance would have led to higher referral rates and tendencies to have referred patients early (Richards & Takeuchi, 2006).

From the collected data, it was ascertained that the referral rates of all the sampled physicians were collectively low. However, Richards and Takeuchi (2006) also discovered that the rates of referral were higher in the group of physicians who were aware of all the services that hospice offered patients. Of the documented referrals, more than 70% of the sampled physicians’ palliative care referrals were made less than the intended six months before the patients’ anticipated deaths (Richards & Takeuchi, 2006). The research group further analyzed their data and tried to determine the reasoning behind these low referral rates. However, the only deduction Richards and Takeuchi (2006) formulated that female physicians were more concerned with the emotional and spiritual well-being of the patients and newer physicians were more aware of current palliative care practices. Both led to higher referral rates to hospice care.

DeVader and Jeanmonod (2011) conducted a study that focused on emergency department (ED) residents and their rates of referral to hospice services. With the knowledge that over a quarter of US cancer patients presented to the ED in their last few months of life, the research group wanted to see if ED residents had made appropriate hospice referrals to those terminally ill patients. DeVader and Jeanmonod (2011) recognized that nearly 37% of the surveyed ED residents had zero and only 9% had at least three hours of training in EOL care. To better understand the reason behind the deficits, the research group implemented an educational intervention with two follow-up analyses.

Immediately following the educational intervention, DeVader and Jeanmonod (2011) noticed dramatic corrections in the previously established deficits among residents. Some of the corrected influences of palliative care referral included, but was not limited to: lack of certainty as to which terminal illnesses were eligible for hospice, lack of confidence in prognoses eligible for hospice, lack of information on available palliative care resources, lack of knowledge as to what services hospice programs provided to patients, lack of comfort with discussing EOL care after they just met the client, and a desire to heal the patient instead of accepting “failure” (DeVader & Jeanmonod, 2011). These corrections were seen to have continued to the six-month follow-up and validated to the research group that their intervention was successful with the sampled ED residents. “Prior to the intervention, 61% of residents reported having never referred a patient to hospice… At six months, 80% of residents reported having referred someone to hospice…” (DeVader & Jeanmonod, 2011, pg. 514).

Ache, Shannon, Heckman, Diehl, and Willis (2010) conducted a study that looked further into the reasons why physician referral to hospice and other palliative care services could have been low. Statistics of hospice use were analyzed and showed that approximately eight percent of the total hospice patient population in the US were African-American. Since eight percent is an incredibly low number, the research group conducted a comparative study between 167 white American and 46 African-American physicians and residents at Mayo Clinics across the U.S.A. to determine what causes could have been identified as influential to this large underuse by African-Americans (Ache, Shannon, Heckman, Diehl, & Willis, 2010).

Following analysis of the sampled facilities' records, Ache et al. (2010) discovered that hospice referral rates were collectively higher in the proportion of hospice patients who were of the same race as their physician. White American physicians were accountable for 85% of white hospice patient referrals and only 5% of African-American hospice patient referrals. Similarly, African-American physicians were accountable for 60% of African-American hospice patient referrals and only 25% of white American hospice patients (Ache et al., 2010).

Through analysis of the survey results, Ache et al. (2010) also noticed a number of significant differences between the attitudes and feelings towards hospice referral held by the sampled population of physicians. The responses from African-American physicians determined that they felt more reluctance from patients and families, specifically of minority groups, than did the white American physicians. The sampled white American physicians' responses indicated that they felt more certain that their referrals to hospice were appropriate and could offer their patients and families comfort. Although these differences in hospice referral patterns seemed to be due to the physicians' race, as well as their personal feelings and opinions, it could also have been influenced by the patients' race. Differences in feelings and opinions towards hospice care and other palliative services between different races in the U.S.A. were further examined by the student researcher.

Ethnic Differences

As aforementioned, the rate of African American hospice use is very low compared to use by the white American population. Ladd (2014) began her research with a review of previous literature covering the topic of African American's views of EOL care. Through her review, the researcher discovered specific trends of the African American population that included: having been less likely to have completed advance directives (AD) and living wills (LW), and having been more likely to have pursued intensive therapies near death (including cardiopulmonary resuscitation (CPR) and mechanical ventilation (MV). The most common result Ladd (2014) received for every treatment that could possibly keep them alive to have been done was God's will. In other words, God would have taken them if it was their time to go.

Upon further analysis, Ladd (2014) concluded that African Americans collectively wanted to die in the comfort of their own homes and shared a less positive opinion of hospice care. It was then hypothesized that these patterns were driven by a general mistrust in the American healthcare system by African Americans, an increased religiosity held by African Americans, and a lack of healthcare literacy held by African Americans.

The U.S.A. had a history of using African Americans as a sample population for unethical medical studies. An example of this was the infamous Tuskegee Syphilis Study that lasted over half a century in Alabama. African Americans had a higher rate of church attendance than white Americans. This strong connection to faith and a congregation could have created a strong believe that God had a plan for each person and His will should not have been tampered with by medical professionals. Such a strong connection could also have created a strong familial-like support system for terminally ill African Americans that could have dampened the need for additional comfort measures to be taken. A previously established mistrust of the U.S.A. healthcare system could have also created misconceptions of the current healthcare system. Since the healthcare system has already failed the African American population before, African Americans may had no desire to have further explored options for terminal patients or to have learned more about what services hospice care could offer their family and loved ones (Ladd, 2014).

Kwon, Hattori, Lee, and Kim (2015) conducted a study of patients from three separate Asian countries that evaluated trends in EOL healthcare preferences. Through analysis of questionnaire results from 899 citizens of Korea, China, and Japan, the research group found many similarities with EOL preferences held by the African American population. Interestingly, the majority of similarities were seen in the Korean and Chinese populations and not as much in the Japanese population of respondents.

Kwon et al. (2015) found that the sampled Korean and Chinese populations shared a desire to use aggressive EOL healthcare treatments. This preference of aggressive treatments aligned with that of African Americans. It was also found that over half of the Korean and Chinese respondents believed that the longevity of life was not something that could be determined by medical professionals and treatments. Instead, similarly to African Americans, this Asian population believed that life was something that only could have been determined by heaven or God. A third similarity was found in regards to the fact that the majority of Asian respondents preferred to make EOL care decisions together with their families instead of alone. This was similar to the African American population that preferred to make decisions with their families and had a church congregation that supported them (Kwon et al., 2015).

Although many of the sampled Asian population’s preferences were in alignment with aggressive EOL care and treatments, Kwon et al. (2015) did discover a common understanding of terminal illness and its many complications. This understanding was held by more of the sampled Japanese population than the others. Most of the research group’s respondents, including the Japanese population, agreed that if they had been in a situation where they were diagnosed with a terminal illness and treatments would have been futile, they preferred to withdraw treatments and accept their death. The most prevalent reason behind this preference was a fear of having become a burden to their family and loved ones, especially among the younger population (Kwon et al., 2015). Regardless of the reason, this preference aligned well with the idea of palliative comfort care that hospice programs provided to terminally ill patients.

A final similarity that Kwon et al. (2015) found within their responses was a general lack of ADs and LWs that could have been critical to fulfillment of the respondents EOL choices. This was not only a similarity shared with the African American population, but it was also found to be a similarity in the older Latino American population. This was discovered in a study conducted by Kelley, Wegner, and Sarkisian (2010) after they interviewed seniors in Los Angeles about their EOL care preferences. The only other similarity that the research group found between the Latino population and the other aforementioned studied ethnic populations was that they desired to involve their families in their EOL care decisions (Kelley, Wegner, & Sarkisian, 2010).

Those two factors of EOL preferences were the only two drawn between the three populations that American palliative care and hospice healthcare workers could have come into contact with. Over 80% of the Latino interviewees expressed a desire for their EOL care to have been focused on comfort measures instead of aggressive treatments (Kelley et al., 2010). To further reinforce this preference, between 70% and 80% of the sampled population did not want CPR, MV, or feeding tubes during the last months of their lives. From these results, Kelley et al. (2010) determined that the older Latino American population would have been an important target for education on palliative care options. It would also have been incredibly beneficial to the Latino population, as well the Asian and African American populations, to have encouraged the creation of individual ADs and LWs.

Barriers to Receiving Services

Carlson, Barry, Cherlin, McCorkle, and Bradley (2012) conducted a national survey that looked at enrollment eligibility requirements and procedures of non-profit and for profit hospice programs across the U.S.A. The results were compared to the basic requirements for enrollment into Medicare-paid hospice programs, since the majority of U.S.A. hospice patients are covered by Medicare health insurance. It was recognized that “Ninety-eight percent of the US population [lived] close enough to a hospice to receive care… [however] more than half of patients who [were] eligible and appropriate for hospice care [died] without receiving it.” (Carlson, Barry, Cherlin, McCorkle, & Bradley, 2012, pg. 2690). To account for this enormous discrepancy, the research team hypothesized that hospice programs had made additional requirements for enrollment that excluded many of the otherwise eligible patients (Carlson et al., 2012).

After the research team reviewed responses from 591 hospice programs, Carlson et al. (2012) discovered that only about one third of the surveyed hospices had an “open-enrollment” policy that had not placed any additional barriers to Medicare-covered patients receiving their services. Most of these easily accessed hospice programs were found to be located in or associated with larger hospitals. The other 78% of hospice programs had reported at least one additional requirement for enrollment into their programs. Some examples of these additional requirements could have included the patients' inability to have received: chemotherapy treatments, parenteral feedings, blood transfusions, radiation treatments (Carlson et al., 2012).

Carlson et al. (2012) deduced that one of the strongest influences on hospice programs having decided to increase the requirements for enrollment could have been the excess cost of hospice care to more difficult patients would have needed. Because Medicare coverage of hospice services was granted to the patients per diem, costs that extended beyond that baseline of coverage were absorbed by the hospice program itself. Thus, the hospice program would have lost money if they had agreed to take on more needy patients that wanted or required some of the aforementioned examples in their care (Carlson et al., 2012).

Conclusion

The questionnaire respondents and interviewees that were mentioned in this review were in desperate need of further education on the EOL care options that the US has developed for its citizens. The African American, Korean, and Chinese populations in particular needed education on the benefits that palliative care programs, such as hospice, could have provided for them if they had become terminally ill. In contrast, the Latino and Japanese populations needed further education on how they could have created ADs and LWs that wrote out their personal desires to avoid aggressive EOL treatments. The decision to have forgone aggressive and curative care and pursued only comfort care was not an easy one for terminal patients to make, no matter their ethnic background and beliefs.

Furthermore, the disparities noted between physician referral practices could have affected the patients' decisions to pursue less aggressive treatments at the EOL. To only escalate the delicacy of this situation, hospice programs across the US have been known to enforce additional barriers to terminal patients receiving their care and services. These knowledge deficits, misconceptions, and barriers to enrollment that have been noted in various regions of the U.S.A., could also have contributed to the underutilization of hospice services seen across the country and in our state. The student nurse hoped to have better defined the largest cause of hospice underuse in northeast Mississippi through this research study.

Chapter III

Research Design

The student researcher used a cross-sectional, non-experimental comparative research design for this study. The research study was designed to compare the perceptions of hospice care between healthcare professionals and the general public of northeast Mississippi to determine if a statistically significant difference existed between the two populations. The independent variable of this study was the sampled populations' exposure to and knowledge of hospice care and services. The dependent variable of this study was the average perception of hospice care held by each sample population.

The student researcher hypothesized individuals who had been exposed to and taught about hospice care and services as a healthcare professional would have held a significantly different perception of hospice care than the general population. The student researcher made her hypothesis because the sampled members of the general public may or may not have had prior exposure to or knowledge of hospice care and services at the time they were surveyed. The sampled individuals' perceptions of hospice care existed before they were surveyed by the student researcher. The student researcher analyzed and compared the average perceptions of the two sample populations without having introduced any treatment or manipulation. Therefore, the research design was non-experimental and comparative.

Controlling Variables

The student researcher held the variables constant by ensuring the two sample populations did not overlap. To do this, the student researcher asked each member of the general public what their occupation was before she presented a survey and cover letter. If the person told the student researcher their occupation was one of the aforementioned healthcare professionals, the student researcher presented them with a healthcare professional survey instead of a general public survey.

Extraneous variables may have existed that affected the results of the completed surveys. For example, the surveyed individuals in the general public population could have previously had an occupation in the healthcare field that exposed them to or taught them about hospice care and services. Also, the surveyed individuals in the general public population could have had a close friend or relative who worked as a healthcare professional and exposed the surveyed individual to or taught the surveyed individual about hospice care and services. The student researcher had no control for these possible variables since gathering such data was too time-consuming for the purposes of this study.

Selection of Subjects and Settings

The target populations of this study were members of the general public and healthcare professionals across the U.S.A. The student researcher was limited to the populations that were present in northeast Mississippi. Therefore, further studies would have been needed to generalize results in other populations. The accessible populations were members of the general public and healthcare professionals present in northeast Mississippi at the time of survey distribution.

The student researcher believed the two accessible populations were adequately representative of the target populations. The roles and duties of the sampled healthcare professionals did not vary from state to state at the time of survey distribution. The makeup of the accessible general public population in northeast Mississippi consisted of a wide variety of different occupations, education levels, faiths, ages, and races. Therefore, the accessible populations of northeast Mississippi were as generalizable as they could have been to the target populations across the U.S.A. The student researcher understood that the Southern culture and religious makeup could have affected the results and may not have been generalizable to the entire country. The only other factor that could have affected the generalizability of the accessible populations to the target populations was the method of sampling.

The selection of the subjects for this research study was done through convenience sampling. To obtain an adequate number of responses from healthcare professionals, the student researcher used two different hospitals in northeast Mississippi. The two sampled hospitals included: Baptist Memorial Hospital: Golden Triangle in Columbus, MS; Oktibbeha County Hospital in Starkville, MS. The student researcher was granted consent via a consent form signed by a representative of each facility before collecting any data (Appendix A). The student researcher planned to obtain between 30 and 40 responses from healthcare professionals in northeast Mississippi. The facilities sampled offered hospice care services.

To obtain an adequate number of responses from members of the general public in northeast Mississippi, the student researcher surveyed individuals at a local superstore. By using a commonly visited setting to survey members of the general public, the student researcher hoped to obtain responses from individuals with a wide variety of occupations, education levels, faiths, ages, and races. The student nurse also asked each individual if he or she was at least 18 years old before presenting a survey and cover letter. This was done to ensure that no minors participated in this research study. The student nurse planned to obtain between 30 and 40 responses from the general public of northeast Mississippi.

By obtaining 37 responses from the accessible general public and healthcare professional populations, the student nurse hoped to attain an average perception that adequately represented northeast Mississippi. A 15-question survey was used to collect data on knowledge of hospice care to determine if a statistically significant difference existed between healthcare professionals and the general public.

Data Collection Tool

The student researcher created a survey tool titled “Two Cents on Hospice” to use in this research study. The survey consisted of two demographic questions regarding the participating individuals’ ages and ethnicities. It included an additional 11 questions meant to gauge the participating individuals’ knowledge of hospice care. The last two questions on the survey tool discerned whether or not participating individuals would have encouraged a loved one to use hospice or planned to use hospice themselves if faced with a terminal illness. The tool “Two Cents on Hospice” provided each participant a total of 15 questions to determine an accurate perception, and also featured a cover letter with instructions (Appendix B and C). To keep the completed surveys separated between the two sample populations, the healthcare professional surveys were labeled “Two Cents on Hospice A” and the general public surveys were labeled “Two Cents on Hospice B.”

Since “Two Cents on Hospice” had not been used prior to this research study, the survey tool had no established validity or reliability. The survey tool had only face-value validity as it was reviewed by a panel of nursing experts before data collection was conducted. However, the 15-question survey tool had 11 knowledge-based questions and two straight-forward questions of opinion. Since both the participating individuals’ knowledge and opinions were assessed through “Two Cents on Hospice,” the survey tool accurately provided the student researcher with their perceptions as “perception” was previously defined.

Data Collection and Analysis

As previously explained, the student researcher obtained consent from each healthcare facility to visit and survey staff members for data collection. After receiving consent from the facility, the student researcher scheduled one day to visit each facility and collect data. On each day of data collection, the student researcher first called her contact at the scheduled facility to ensure it was approved for her to visit and distribute surveys during the day. Upon arrival to the facility, the student researcher visited the intensive care unit (ICU), followed by the emergency department (ED), a general medical-surgical floor, and the respiratory therapy department.

The student researcher arrived to each unit/department with ten “Two Cents on Hospice A” surveys with attached cover letters. A collection box labeled: “Two Cents on Hospice A,” was also brought to each location. The student researcher recited an identical script to the staff of each location to inform them that: (a) she was a student in the Baccalaureate nursing program and residential honors program at MUW; (b) the survey was a part of an undergraduate nursing research project; (c) any staff member willing to complete a survey had three hours to do so before the student researcher returned to collect the completed surveys; (d) staff members willing to complete a survey needed to first read the attached cover letter carefully; and (e) all completed surveys needed to be turned into the labeled collection box, which would be located in the unit/department breakroom.

The student researcher left the ten “Two Cents on Hospice” surveys with cover letters and the labeled collection box in the unit/department breakroom for three hours to allow for survey completion. After the allotted time, the student researcher returned to each location and collected the box that contained completed surveys and any remaining surveys with cover letters.

Upon retrieval, the student researcher thanked the staff members of the unit/department for their time. The student nurse also thanked her facility contact after collection of all surveys.

To survey the general public, the student researcher scheduled two days to visit the local superstore. For each visit, the student researcher took a folding table, thirty “Two Cents on Hospice” surveys, and two large boxes with a slit cut in labeled: “Two Cents on Hospice A” and “Two Cents on Hospice B,” with her. The student researcher set up her table at the front door of the superstore and presented the research survey to individuals entering and exiting the store until all surveys were completed. As previously described, the student researcher first asked each individual if they were over the age of 18, and what their current occupation was before presenting a survey and cover letter to ensure there was not any cross-over between the two sample populations.

Upon presentation, the student researcher told the individual: (a) she was a student in the Baccalaureate nursing program (BSN) and residential honors program at Mississippi University for Women (MUW); (b) the survey was a part of an undergraduate nursing research project; (c) the participant had however much time he or she needed to complete the survey; (d) the individual needed to read the attached cover letter carefully before answering the survey; and (e) the completed survey needed to be turned into the collection box with the label that coincided to the survey. The student researcher allowed each individual whatever amount of time he or she needed to complete the survey and stayed where she was while the survey was being answered to further ensure anonymity. The student researcher then allowed the individual to drop their survey into the labeled boxes themselves. The student researcher thanked each participant for completing the survey.

After the surveys were collected, the student researcher graded each survey's 12 knowledge-based questions with an answer key, and transcribed the results of the surveys onto an Excel spreadsheet. All results were transcribed into two different columns, separating the general public sample population and the healthcare professional sample population. The student researcher performed a *t*-test to compare the average perception held by each sample population. This test was appropriate because the *t*-test specifically measured the difference between means of two separate groups, such as the general public sample population and the healthcare professional sample population.

During data analysis, paper surveys were stored in a padlocked bag inside of an honors research committee member's locked office in the BSN department on MUW campus. Once the data was transcribed onto an Excel spreadsheet, the spreadsheet was saved onto one empty USB jump drive. When it was not in use for research, the USB jump drive was stored in a padlocked bag inside of an honors research committee member's locked office in the BSN department on MUW campus. By storing all survey results in a locked bag inside of a locked faculty member's office, the information was safe and could not be manipulated or seen by anyone other than the student researcher. The student researcher held the only key to the padlock on the storage bag.

By following each of the procedures listed above, no personal identifying information was obtained by the student researcher. The results of the completed surveys were held in complete confidentiality and ensured anonymity throughout the entire research process. The two demographic questions and the two opinion questions on "Two Cents on Hospice" were used only to recognize trends in perceptions of hospice care held by different sampled age groups and ethnicities. No risks were identified to the participants in this nursing research study.

Limitations

Several limitations existed in this research study. The first limitation identified was a sample size from one region in the U.S.A. A second limitation was the possibility that surveyed participants did not answer the opinion questions honestly. A third limitation was a short time frame for data collection. Therefore, only healthcare providers present during the collection time were represented in the data.

Chapter IV

Results

The student researcher collected data from the ED, ICU, and respiratory therapy units at the proposed healthcare facilities, as well as the local grocery store. The student researcher obtained 37 responses from both the healthcare professional and general public sample populations, yielding a total of 74 responses. As evidenced by the responses to the two demographic questions, requesting each participant circle their age range and ethnic group, included on the survey, respondents from each of the five age groups were represented. Unfortunately, respondents only identified with three of the six ethnicity options: Caucasian, African-American, Asian, Hispanic, Bi-Racial, and other. (See Figure 1.)

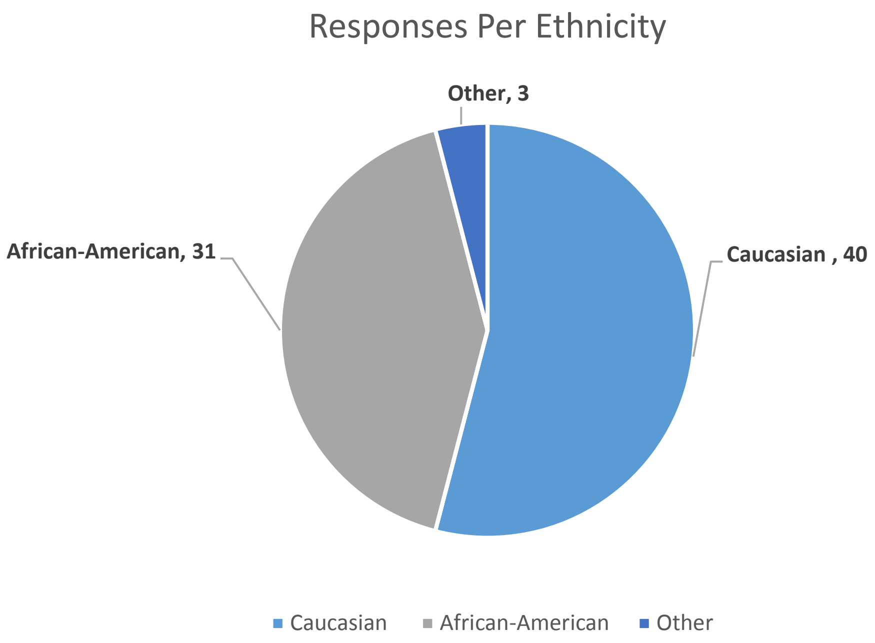


Figure 1: Number of responses based on ethnicity identified with by the participants

Out of a possible 11 points, the average score for each of the two populations were between eight and nine. The average for the healthcare professional population was 8.32, and the average for the general public population was 8.16. The student researcher performed a *t*-test with two independent samples to compare the two averages. The t-score of the one-tailed two-sample *t*-test was 0.463 and the p-value was 0.322. The confidence interval for this test was 95%. The degrees of freedom for this test was 72 since the total number of responses was 74 and there were two different samples.

The null hypothesis of this research study stated that there would be no statistically significant difference between the perceptions of hospice care among healthcare professionals and the general public of northeast Mississippi. Because the student researcher had a 95% confidence interval, the confidence coefficient was 0.95. The confidence coefficient indicated that the p-value of the *t*-test would have to be less than 0.05 to be significant and allow the student researcher to reject the null hypothesis. If the null hypothesis was rejected, the student researcher could be 95% confident that the original research hypothesis would be accurate if the study was repeated.

Although the median and the mean of the healthcare professional population was greater than that of the general public population, the p-value of the one-tailed two-sample *t*-test was 0.322. Because the p-value was greater than 0.05, the student researcher failed to reject the null hypothesis. The results proved there was no statistically significant difference between the perceptions of hospice care among the healthcare professional and the general public participants in the research study. It could also be inferred by the 95% confidence interval that the same results would obtained if the study was repeated under the same conditions.

Out of the 11 knowledge-based questions on the survey, four of the questions were missed at least ten times by both sample populations. (See Figure 2.) Out of the four questions answered incorrectly by at least 27% of participants, three were answered incorrectly by 62% of participants from one sample population. The student researcher found it quite significant that

62% of the healthcare professional sample population was responsible for one of the three frequently missed questions.

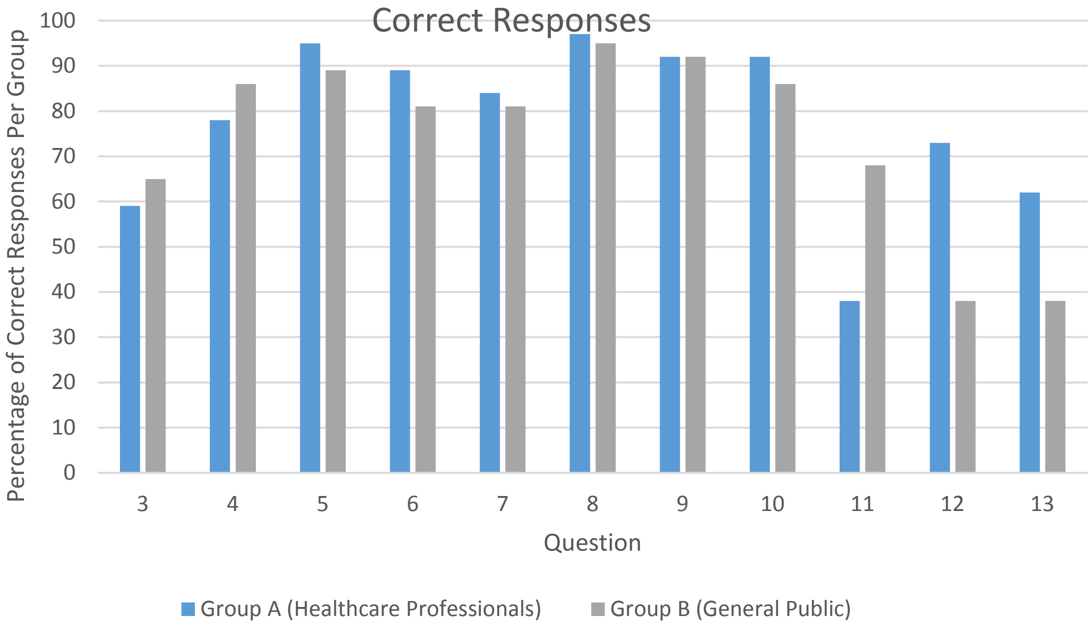


Figure 2: Percentages of correct responses to each question on the Two Cents on Hospice survey by group

Question 3 on the Two Cents on Hospice survey asked the participants if hospice care was designed for terminally ill patients with less than six months to live. Fifteen healthcare professionals and 13 members of the general public answered question three incorrectly. Question 11 asked if hospice provided patients with physical and/or speech therapy. Twenty-three healthcare professional (62% of the sample population) and 12 participants from the general public answered question 11 incorrectly. Question 12 asked participants if hospice provided patients with 24/7 in-home nursing staff. Ten healthcare professionals and 23 members of the general public (62% of the sample population) answered question 12 incorrectly. Lastly, question 13 asked participants if hospice lasted for only the predicted six-month time period or until the patient’s death. Question 13 was answered incorrectly by 14 healthcare professionals and 23 members of the general public (62% of the sample population).

The sample populations were chosen by convenience sampling, which meant that the two populations were not 100% random or 100% generalizable to similar populations across the country. However, assuming that the sample populations used in the research study were generalizable, the findings were surprising. It was emphasized by the student researcher that the healthcare professionals used in the study worked in areas of the hospital frequented by hospice patients and/or patients whom were eligible for hospice enrollment. The student researcher anticipated a great number of general public members would answer some of the questions incorrectly. However, the student researcher did not anticipate the same number of incorrect responses from healthcare professionals that were often in contact with hospice patients and hospice-eligible patients.

Since the four questions missed by over a quarter of all participants were incorrectly answered by members of both the general public and healthcare professionals (whom should be knowledgeable about hospice), it was evident to the student researcher that both populations needed further teaching on hospice and its multitude of services. Both unknowledgeable healthcare professionals and a hospice-uneducated general public that created and continue the trend of hospice underutilization in northeast Mississippi. Because the student researcher used a 95% confidence interval to come to that determination, it could have been inferred with 95% certainty that the nationwide underutilization of hospice care and services could also be attributed in part to the same populations.

Additional Findings

Even though results of the knowledge-based questions indicated a need for education on hospice care and services, most participants positively answered the two opinion questions on the survey. (See Figure 3.) The opinion questions asked participants if they would have considered hospice care if they were personally diagnosed with a terminal illness and if they would have encouraged a parent or sibling to consider hospice care if they were faced with a terminal illness. Out of 74 total participants, only ten answered "no" to one and only five answered "no" to both opinion questions. Overall, nine participants responded negatively towards using hospice care themselves if they were terminally ill. Six participants responded negatively towards encouraging a close family member to use hospice care if they had a terminal illness. It was interesting to the student researcher that more respondents said they would encourage and hope a loved one would enroll into hospice care if eligible than they would personally.

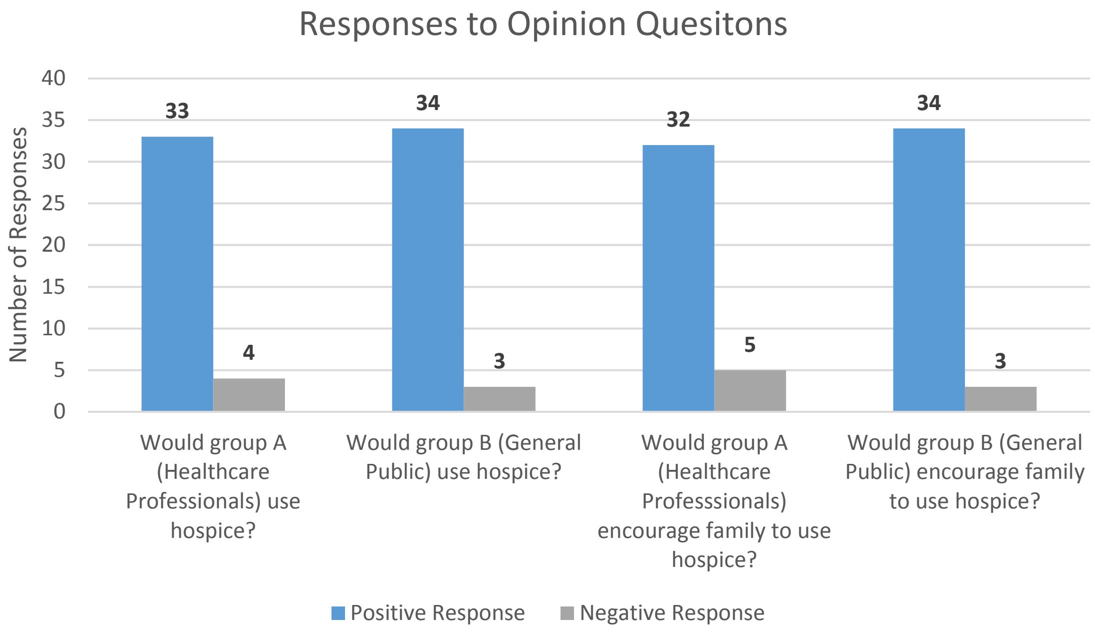


Figure 3: Responses to two opinion questions by group

The student researcher further analyzed the demographic data of the participants whom responded negatively to the two opinion questions to determine any correlations. One half of the negative responses (five out of ten) were made by healthcare professionals and the other half were made by members of the general public. Two of the negative healthcare professional responses were made by Caucasian participants (20%). The eight remaining participants whom responded negatively towards using hospice services for both the healthcare professional and general public populations identified with the African-American ethnicity (80%). One half of the negative responses were made by participants in the 18 to 30 year old age group, two responses were made by participants in the 31 to 45 year old age group (20%), and the remaining three responses were made by participants of the 46 to 65 year old age group (30%).

The student nurse found it important to note the majority of negative responses were made by participants whom identified as African-American and there were no negative responses from the two oldest age groups. These findings verified there could be a significant difference between both the opinions of hospice care and services as well as knowledge of hospice among the different ethnicities identified in this study. The student researcher also wondered if the findings pertaining to the youngest three age groups could indicate a fear of EOL care/planning along with a lack of knowledge of EOL care options among the young to middle-aged population of the study.

Because the student researcher found similar studies that focused on the difference of hospice perceptions among difference ethnicities, the student researcher decided to run a t-test on the average scores between the two most common ethnic groups: Caucasian and African-American. The student researcher kept a 95% confidence interval for the non-directional two-sample *t*-test. The 40 Caucasian respondents had a median score of nine and an average score of 8.5. The 31 African-American respondents had a median score of eight and an average score of 8.032. The t-score of the statistical *t*-test was 1.557 and the p-value was 0.124. Similarly to the initial t-test, the mean and average score of the Caucasian participants were higher than those of the African-American participants. However, the p-value of 0.124 was greater than 0.05 and was statistically insignificant.

The student researcher organized the total number of responses according to responses to question 1 on the survey, which asked each participant for their age group. (See Figure 4.) The youngest group, which ranged from 18 to 30 years, included 17 participants. The average score of the youngest 17 respondents was 8.294. The next age group ranged from 31-45 years and included 22 participants. The average score was 8.409. The next and largest age group ranged from 46 to 65 years and included 25 participants. The average score for the largest group was 8.56. The second oldest age group, which included only eight participants, ranged from 66 to 80 years, and had an average score of 7.75. The oldest and smallest age group, which included two participants, ranged from 81 to 100, and had an average score of 9.

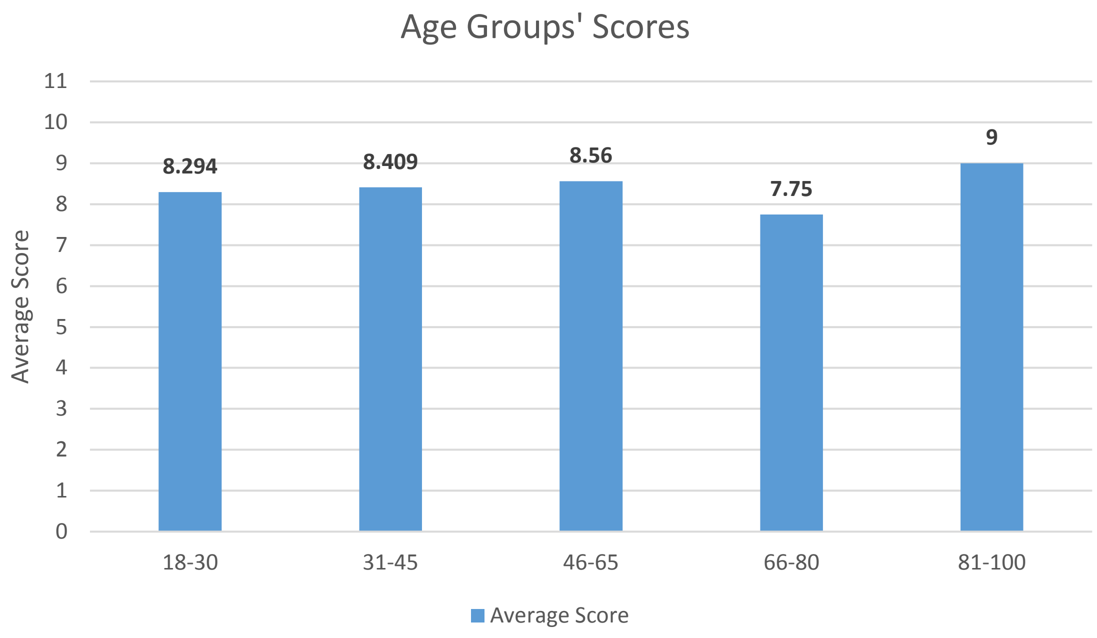


Figure 4: Average score by age group identified with by participants

The difference of average scores between any two of the five age groups was too little to be considered statistically significant. However, having the responses divided up between the different age groups presented some insight to the student researcher. Out of all five age groups, the age group with the lowest mean score was the 66 to 80 years old group. It has been and continues to be common for Americans to seek retirement between the ages of 60-65. One cause for this trend was and still is the fact 65 years is the age of eligibility for Americans to go onto Medicare, a government funded healthcare program.

This age group stood out to the student researcher for three reasons. First of all, once a person retires, he or she often loses any healthcare insurance or programs that were provided to them through their work, leaving those over the age of 65 with only Medicare health insurance. Secondly, it has been, and continues to be, understood by healthcare professionals that the risk of developing a terminal illness increases with a person's age. Since 66 to 80 years was the second-oldest age group listed on the survey and one of the most populous age groups seen in the U.S.A., this population is at a pretty high risk of developing terminal illnesses. The third reason why the student researcher found this low average score so interesting was that the ages of 66 to 73 years falls right into the population of "baby boomers." The "baby boomers" were all the children born following the end of World War II in the U.S.A. With men, husbands, and fathers returning home from long military tours in Europe and the Pacific, the country saw a huge spike in birthrate and population from 1946 through 1964. Because there were so many Americans were born during this time period, the "baby boomers" and their older siblings (whom would make up the remainder of the age group) make up the largest percentage of our nation's population today.

This population of Americans desperately needed to be well-educated on the health care and services that were available to them as they began and continue to age. Because these individuals were at a higher risk for developing terminal illnesses and possibly becoming eligible for hospice, they should have been educated that hospice services could be covered by Medicare. Since the size of this aging American population was so large, there were fewer people born in the succeeding age groups to help care for them. The aforementioned reasons created a need for those applying and being accepted to Medicare, those already on Medicare, and the other Americans whom fall into this age group to be better educated by their healthcare professionals on the many services available for their utilization, including hospice care.

In order to further analyze the differences in results in correlation to age group, the student researcher performed a Spearman's rho test. To categorize the participants into the 5 different age groups, the student researcher gave 1 point to those who fell into the youngest age group, 2 points to those who fell into the second youngest age group, so on and so forth. This statistical test indicated statistically significant results in correlation of responses to three of the 11 knowledge-based questions with the participants' age. (See Figure 5.)

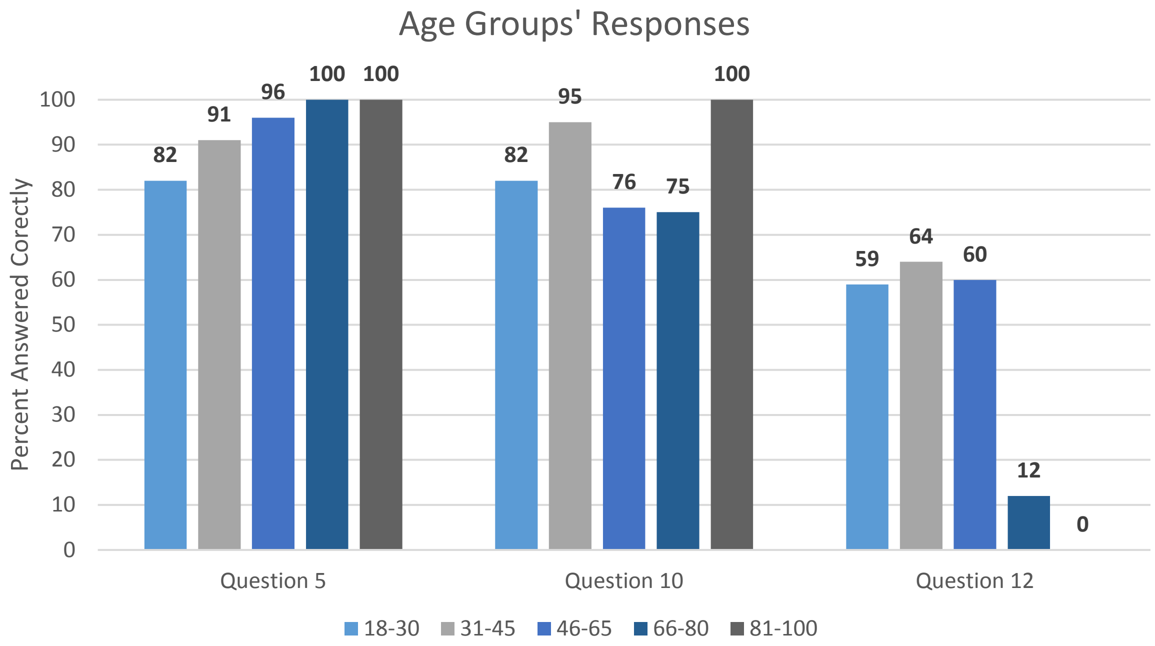


Figure 5: Percentages of correct responses to questions 5, 10, and 12 by age group

Question 5 on the Two Cents on Hospice survey asked participants if hospice care can be an in-home service to clients. The p-value of correlation between responses to this question and age was 0.033, which indicated statistical significance. The correlation coefficient was 0.215. The correlation coefficient indicates that more of the older participants of the sample populations (who were given more points based on their age group) correctly answered question 5 than did the younger participants.

Question 10 asked participants if hospice provided clients with durable medical equipment. With a p-value of 0.039, the correlation coefficient for question 10 was -0.206. The reason this number was so low was because much more of the younger participants (who were given less points than the older participants based on their age) answered question 10 correctly than did the older participants in the sample populations. Similarly to question 10, question 12, which asked participants if hospice provided twenty-four hour in-home nursing staff, had a negative correlation coefficient. With a p-value of 0.047, question 12 had a correlation coefficient of -0.196. This indicated that more of the younger participants correctly answered question 12 than the older participants in the sample populations.

These findings further established a need for education on hospice care and services in the older populations in northeast Mississippi.

Comparison to Prior Research

The student researcher, much like many of the research teams mentioned in chapter two, found that a knowledge deficit surrounding hospice care eligibility and service provision. These deficits were found in both the healthcare professional sample population and the general public sample population. Unfortunately, the student research was not able to compare hospice knowledge and preferences across several different aforementioned ethnicities. However, the student researcher did receive enough responses to test the perceptions of hospice care between the Caucasian and African-American sample populations within the study.

Although the difference in average scores between the two ethnic populations was not statistically significant, there was a difference that coincided with the research study completed by Ladd (2014). The average and median score for the Caucasian population was higher than the African-American population. Also, the negative responses to the opinion questions at the end of the survey were came more from the African-American population than the Caucasian population. It could be inferred that African-American sample population, and possibly the African-American population of northeast Mississippi, felt more negatively towards hospice care and services than the Caucasian sample population.

Limitations

Numerous limitations were faced during the process of this research study. The first limitation was the method of sampling. Because there was so little time and no monetary resources dedicated to the study, the student researcher used a convenience sampling method. The most effective method of sampling was random sampling, whether it was simple or stratified. Convenience sampling was not random at all. There was no way to guarantee that each individual had an equal chance of being chosen as any other individual. Only the healthcare professionals at the two healthcare facilities and the members of the general public at the particular grocery store, whom were present during the times of data collection, had a chance to participate in the study.

A second limitation to the study was that the student researcher had only two healthcare facilities nearby that contained an ED, ICU, and respiratory therapy unit, and had access to only one grocery store that was located on the outskirts of town. The settings for data collection could have limited the number of responses to the survey. The only three ethnicities chosen on the survey responses were Caucasian, African-American, and other. The student researcher had no participants that identified as Asian, Hispanic, or bi-racial. Two of the age groups listed on the survey included less than ten participants as well. If the student researcher had been able to obtain a larger number of responses, the two sample populations would have been larger and could have better represented the entire populations of healthcare professionals and the general public in northeast Mississippi. More generalizable sample populations that included all six listed ethnicities could have yielded more accurate results that would also have been generalizable to the same populations nationwide.

Another limitation was the fact that the student researcher was not able to keep all conditions constant during data collection. Once the student researcher got onto the different units of the healthcare facility, the charge nurses decided it would be more convenient and easier for the nurses and other workers on the floor to leave the collection box at the nurses' station instead of inside the breakroom. The method of delivery of the surveys to the different professionals on the unit also different between units and healthcare facilities. While the charge nurses of the two ED units allowed the student researcher to deliver a survey to each of the healthcare workers herself, the charge nurse on both ICUs asked the student researcher to leave the surveys with them, as they would deliver them out to the different workers. Because the respiratory therapy workers constantly came and went, the student researcher left a number of surveys and a collection box in each of the two units.

Chapter V

Summary of Research

Through a review of literature, the student researcher discerned a common underutilization of hospice care services by hospice-eligible terminally ill patients. The numerous literature resources suggested different causes of the underutilization. However, no one cause was determined to have caused the common underuse of hospice care services seen across the U.S.A. To better determine a source of hospice underutilization, the student researcher decided to survey healthcare professionals and members of the general public in northeast Mississippi about their perceptions of hospice care.

The purpose of this survey was to compare the average perception of hospice care between a healthcare professional sample population and a general public sample population in order to see if one group had a lower perception of hospice than the other. The student researcher hypothesized that there would have been a statistically significant difference between the perceptions of hospice care among healthcare professionals and the general public of northeast Mississippi. This hypothesis yielded a null hypothesis that there would have been no statistically significant difference between the perceptions of hospice care among healthcare professionals and the general public of northeast Mississippi. The student researcher used convenience sampling as a method of developing the two sample populations.

Conclusions

The student researcher found no statistically significant difference between the two average perceptions of the sample populations. Thus, the student researcher failed to reject the null hypothesis. These results indicated that both the healthcare professionals and the general public in northeast Mississippi shared responsibility for the underutilization of hospice care services.

The student researcher thought healthcare professionals were not well aware of the various services hospice provided due to a lack of education on palliative care and hospice care in school. Thus, the healthcare professional participants did not know much more about hospice care than did the general public participants. It was also thought by the student researcher the survey was too simple to answer, as the majority of the correct responses were “yes”. If the student researcher had included more questions on the survey that had the correct response of “no”, the results might have more accurately reflected the perceptions and knowledge of the participants.

Implications

The results of this research study indicate that nurses needed to be better educated on the eligibility requirements and services provided by hospice care. Physicians also needed to be better educated and have more clinical experience with determining prognoses of hospice-eligible patients. If the nurses, physicians, and other healthcare professionals that frequently came in contact with hospice and hospice-eligible patients did not understand the requirements of hospice initiation and the services provided by hospice, their lack of knowledge and understanding could have caused the underutilization of hospice care. Healthcare professionals also needed to have more experience with handling death and dying patients as the situations surrounding terminal illness can be delicate and easily influenced by the attitudes and techniques of professionals caring for these patients.

Recommendations for Further Research

The student researcher identified a number of limitations faced through the duration of tis research study. For further research on perceptions of hospice care, the student researcher recommended that a more accurate method of sampling was used. Use of a random sampling method would provide the least biased sample populations and yield the most accurate results. It was also recommended that future researchers use a survey that included an equal amount of questions with “yes” and “no” correct answers. With an equal number of “yes” and “no” responses, the survey would not have been as easy to guess correctly.

Another recommendation for further research was that more healthcare facilities from a larger geographical region were used to yield a more accurate average perception for all healthcare professionals in the area. Likewise, the use of members of the general public from more than one location would have yielded a more accurate average perception for the general public of the area. The last recommendation for further research was to include an additional question on the survey that identified the occupations of the healthcare professional sample population. Being able to distinguish between nurses, physicians, and other healthcare professionals would have given the student researcher more information to study. The additional information could have any varying degrees of knowledge and understanding of hospice care and services between the different occupations in the healthcare professional sample populations.

Appendices

APPENDIX A
CONSENT FORM

To whom it may concern:

My name is Christina Lemmermann, and I am a senior nursing student in the Baccalaureate program at Mississippi University for Women (MUW). I am also a student in the Ina E Gordy residential honors program at MUW and am conducting a research study to complete my honors curriculum. My research study, “Comparing Perceptions of Hospice Care in northeast Mississippi,” is designed to compare the perceptions of hospice care held by healthcare professionals and the general public in northeast Mississippi. I am writing to obtain consent to use staff members of this facility in my research study. I have created a survey that assesses each participant’s knowledge about hospice care and the services hospice provides, as well as the participant’s personal opinion on hospice care. I have also created a cover letter for each willing participant that informs them about the nature of the research study, their right to withdraw from the study at any time up until they return the completed survey, and that their results will remain anonymous.

I would like to survey customers of Sunflower grocery store. My purpose for surveying customers is to survey members of the general public who vary in age, race, occupation, experience, and education. My plan is to set up a table at the entrance of the store with several “Two Cents on Hospice B” surveys and a closed collection box to keep answers safe and anonymous. I believe that three hours is plenty of time for willing participants to complete more than enough surveys and return them into the collection box. I have also developed a plan to keep all paper surveys and survey results protected and anonymous, as I am the only one who will have access to them throughout the research process and will destroy them after the study is completed.

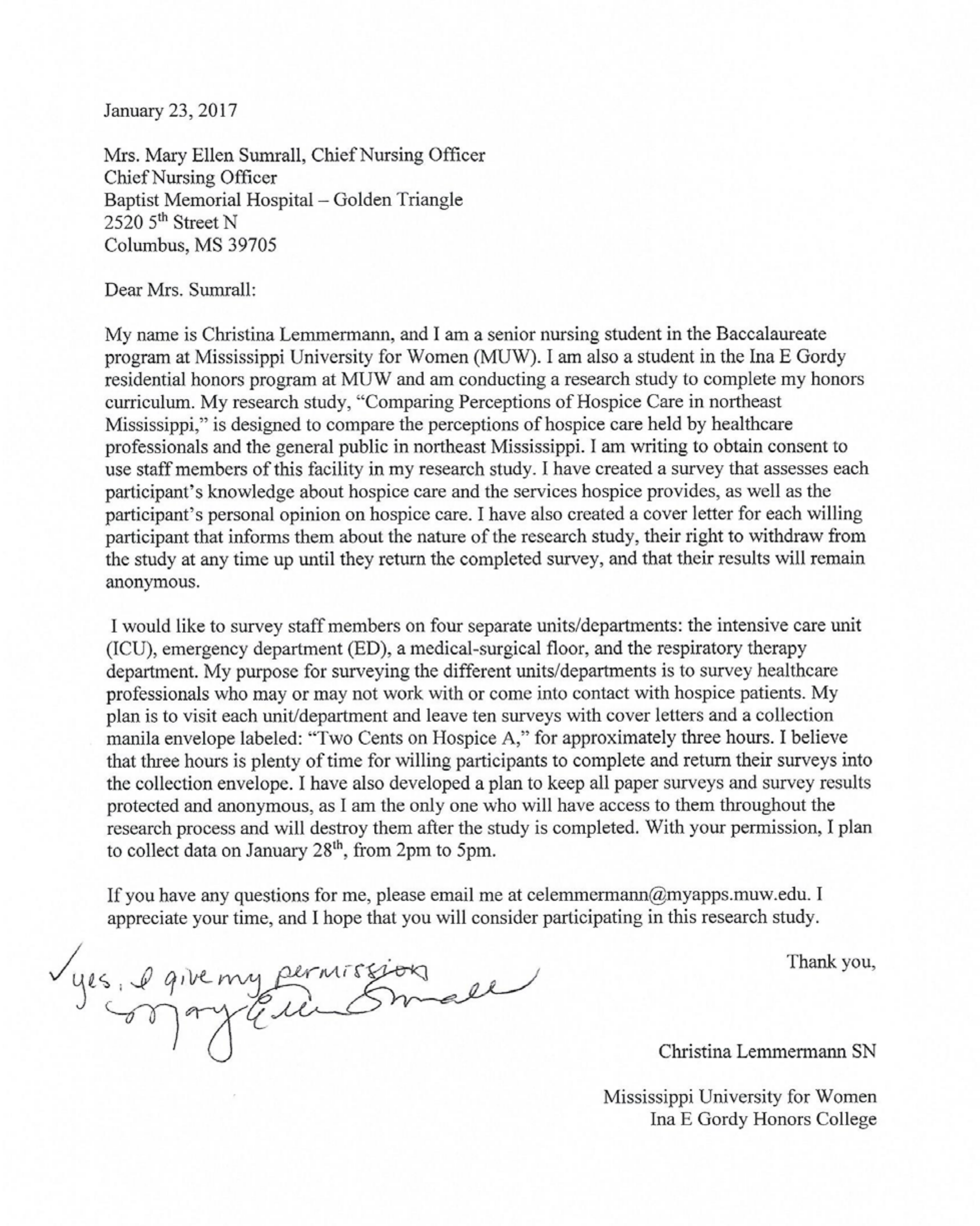
If you have any questions for me, please email me at celemmermann@myapps.muw.edu. I appreciate your time, and I hope that you will consider participating in this research study.

Thank you,
Christina Lemmermann SN

Mississippi University for Women
Ina E Gordy Honors College

Permission granted by Mrs. Townsend (grocery store co-owner) via e-mail on 2/07/2017.

APPENDIX A
CONSENT FORM



January 23, 2017

Mrs. Mary Ellen Sumrall, Chief Nursing Officer
Chief Nursing Officer
Baptist Memorial Hospital – Golden Triangle
2520 5th Street N
Columbus, MS 39705

Dear Mrs. Sumrall:

My name is Christina Lemmermann, and I am a senior nursing student in the Baccalaureate program at Mississippi University for Women (MUW). I am also a student in the Ina E Gordy residential honors program at MUW and am conducting a research study to complete my honors curriculum. My research study, "Comparing Perceptions of Hospice Care in northeast Mississippi," is designed to compare the perceptions of hospice care held by healthcare professionals and the general public in northeast Mississippi. I am writing to obtain consent to use staff members of this facility in my research study. I have created a survey that assesses each participant's knowledge about hospice care and the services hospice provides, as well as the participant's personal opinion on hospice care. I have also created a cover letter for each willing participant that informs them about the nature of the research study, their right to withdraw from the study at any time up until they return the completed survey, and that their results will remain anonymous.

I would like to survey staff members on four separate units/departments: the intensive care unit (ICU), emergency department (ED), a medical-surgical floor, and the respiratory therapy department. My purpose for surveying the different units/departments is to survey healthcare professionals who may or may not work with or come into contact with hospice patients. My plan is to visit each unit/department and leave ten surveys with cover letters and a collection manila envelope labeled: "Two Cents on Hospice A," for approximately three hours. I believe that three hours is plenty of time for willing participants to complete and return their surveys into the collection envelope. I have also developed a plan to keep all paper surveys and survey results protected and anonymous, as I am the only one who will have access to them throughout the research process and will destroy them after the study is completed. With your permission, I plan to collect data on January 28th, from 2pm to 5pm.

If you have any questions for me, please email me at celemmermann@myapps.muw.edu. I appreciate your time, and I hope that you will consider participating in this research study.

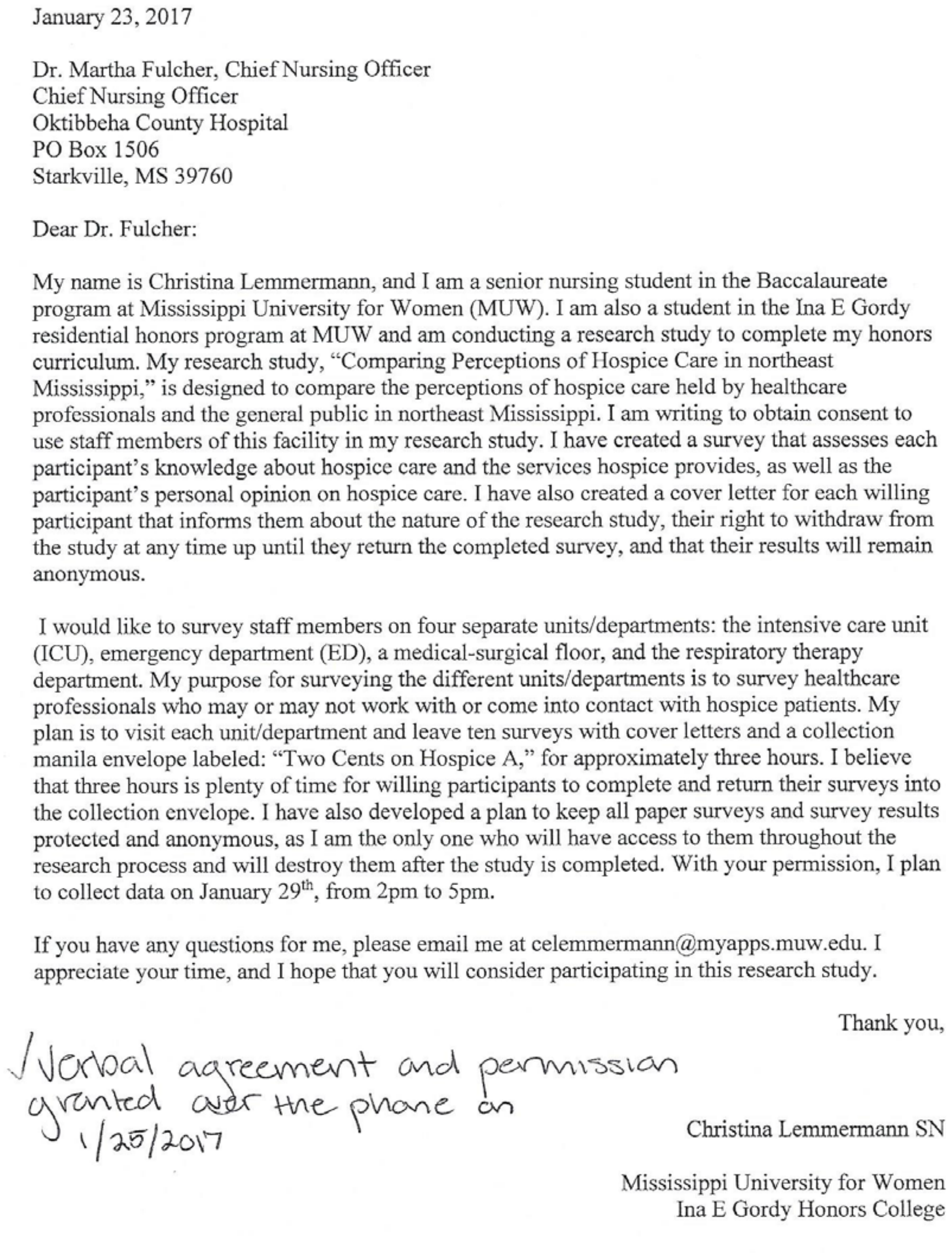
✓ yes, I give my permission
Mary Ellen Sumrall

Thank you,

Christina Lemmermann SN

Mississippi University for Women
Ina E Gordy Honors College

APPENDIX A
CONSENT FORM



January 23, 2017

Dr. Martha Fulcher, Chief Nursing Officer
Chief Nursing Officer
Oktibbeha County Hospital
PO Box 1506
Starkville, MS 39760

Dear Dr. Fulcher:

My name is Christina Lemmermann, and I am a senior nursing student in the Baccalaureate program at Mississippi University for Women (MUW). I am also a student in the Ina E Gordy residential honors program at MUW and am conducting a research study to complete my honors curriculum. My research study, "Comparing Perceptions of Hospice Care in northeast Mississippi," is designed to compare the perceptions of hospice care held by healthcare professionals and the general public in northeast Mississippi. I am writing to obtain consent to use staff members of this facility in my research study. I have created a survey that assesses each participant's knowledge about hospice care and the services hospice provides, as well as the participant's personal opinion on hospice care. I have also created a cover letter for each willing participant that informs them about the nature of the research study, their right to withdraw from the study at any time up until they return the completed survey, and that their results will remain anonymous.

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If you have any questions for me, please email me at celemmermann@myapps.muw.edu. I appreciate your time, and I hope that you will consider participating in this research study.

Thank you,

√ Verbal agreement and permission granted over the phone on 1/25/2017

Christina Lemmermann SN

Mississippi University for Women
Ina E Gordy Honors College

APPENDIX B
SURVEY COVER LETTER
“Two Cents on Hospice A”

Thank you very much for being willing to participate in this research study. This survey is a part of an undergraduate nursing research study focusing on hospice care. If you have completed this same survey in the last month please return this copy to the student nurse. The answers to this survey will remain completely anonymous. Your participation in this research study and your answers to this survey will not affect your employment in any way. You are free to withdraw from this study up until the time you turn the completed survey into the collection envelope labeled: “Two Cents on Hospice A”. Completion and submission of this survey indicates your consent to use the results in the research study. Again, thank you for taking your time to participate and complete this survey.

APPENDIX B
SURVEY COVER LETTER
“Two Cents on Hospice A”

Thank you very much for being willing to participate in this research study. This survey is a part of an undergraduate nursing research study focusing on hospice care. If you have completed this same survey in the last month, please return this copy to the student nurse. The answers to this survey will remain completely anonymous. You are free to withdraw from this study up until the time you turn the completed survey into the collection box labeled: “Two Cents on Hospice A”. Completion and submission of this survey indicates your consent to use the results in the research study. Again, thank you for taking your time to participate and complete this survey.

APPENDIX B
SURVEY COVER LETTER
“Two Cents on Hospice B”

Thank you very much for being willing to participate in this research study. This survey is a part of an undergraduate nursing research study focusing on hospice care. If you have completed this same survey in the last month, or if you are younger than 18 years old, please return this copy to the student nurse. The answers to this survey will remain completely anonymous. You are free to withdraw from this study up until the time you turn the completed survey into the collection box labeled: “Two Cents on Hospice B”. Completion and submission of this survey indicates your consent to use the results in the research study. Again, thank you for taking your time to participate and complete this survey.

APPENDIX C
SURVEY QUESTIONNAIRE
"TWO CENTS ON HOSPICE"

PART I

Please circle the response that best represents you, unless additional instructions are specified.

1. What is your age?

18-30 31-45 46-65 66-80 81-100

2. What race do you identify with?

Caucasian African American Asian Hispanic Bi-Racial Other

PART II

Please circle the responses that best represent your personal understanding.

3. Hospice care is designed for terminally ill patients with less than 6 months to live. Yes No

4. Hospice care is covered by Medicare. Yes No

5. Hospice care can be an in-home service. Yes No

6. Hospice care includes service in nursing homes. Yes No

7. You can keep your own doctor after entering a hospice program. Yes No

8. Hospice offers services to families. Yes No

9. Hospice uses high-dose drugs that speed up death. Yes No

10. Hospice provides patients with medical equipment (wheelchairs, hospital beds, etc.) Yes No

11. Hospice provides patients with physical and/or speech therapy. Yes No

12. Hospice provides patients with a 24/7 in-home nursing staff. Yes No

13. Hospice lasts for only the predicted six-month time period or until the patient's death. Yes No

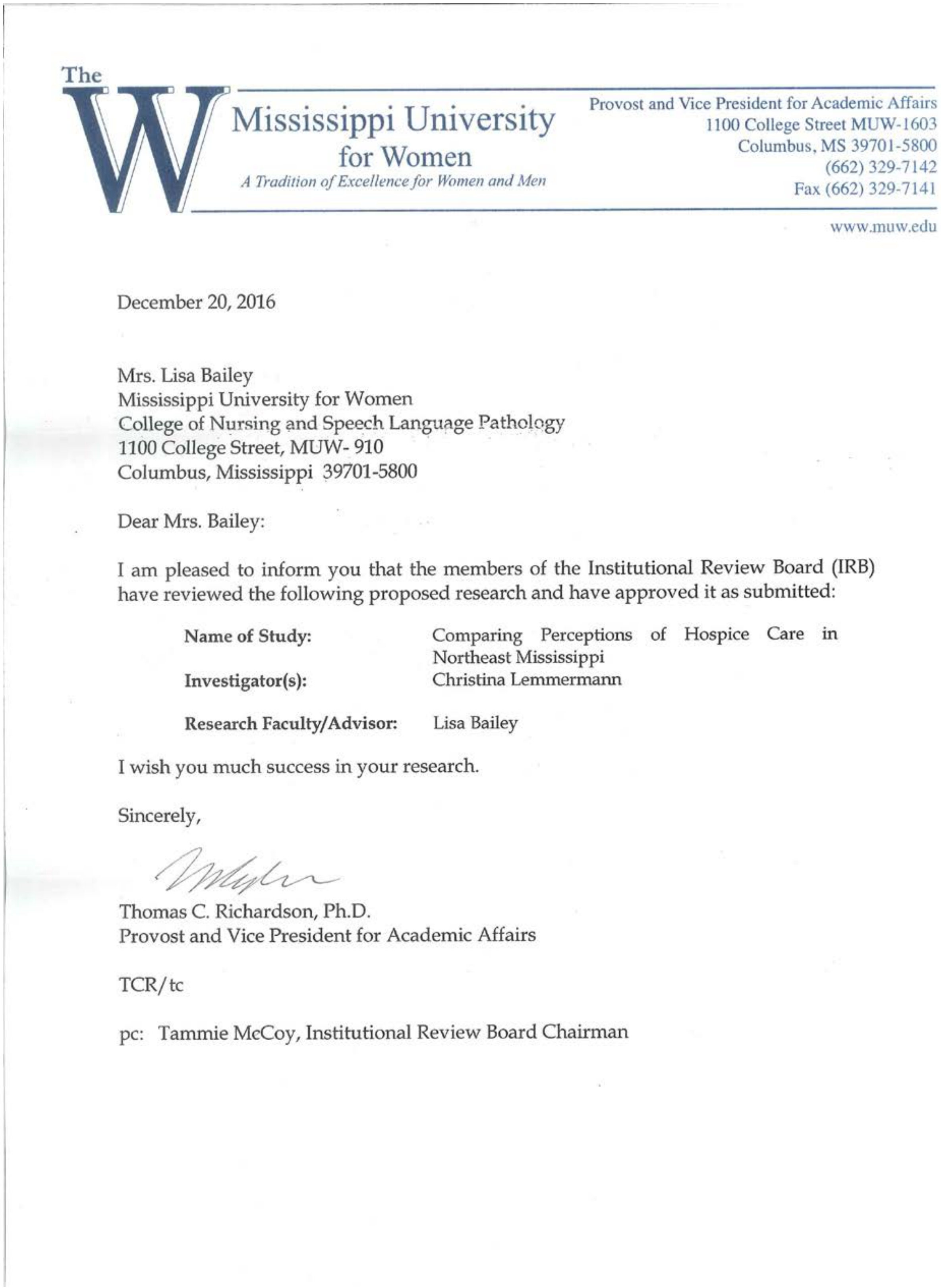
PART III

Please circle the response that best represents your decision regarding end-of-life care.

14. If you were faces with a life limiting illness, would you consider hospice care? Yes No

15. If your parent or sibling was diagnosed with a life limiting illness, would you encourage them to use hospice care? Yes No

APPENDIX D
IRB



The W
Mississippi University for Women
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Provost and Vice President for Academic Affairs
1100 College Street MUW-1603
Columbus, MS 39701-5800
(662) 329-7142
Fax (662) 329-7141

www.muw.edu

December 20, 2016

Mrs. Lisa Bailey
Mississippi University for Women
College of Nursing and Speech Language Pathology
1100 College Street, MUW- 910
Columbus, Mississippi 39701-5800

Dear Mrs. Bailey:

I am pleased to inform you that the members of the Institutional Review Board (IRB) have reviewed the following proposed research and have approved it as submitted:

Name of Study:	Comparing Perceptions of Hospice Care in Northeast Mississippi
Investigator(s):	Christina Lemmermann
Research Faculty/Advisor:	Lisa Bailey

I wish you much success in your research.

Sincerely,

Thomas C. Richardson, Ph.D.
Provost and Vice President for Academic Affairs

TCR/tc

pc: Tammie McCoy, Institutional Review Board Chairman

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